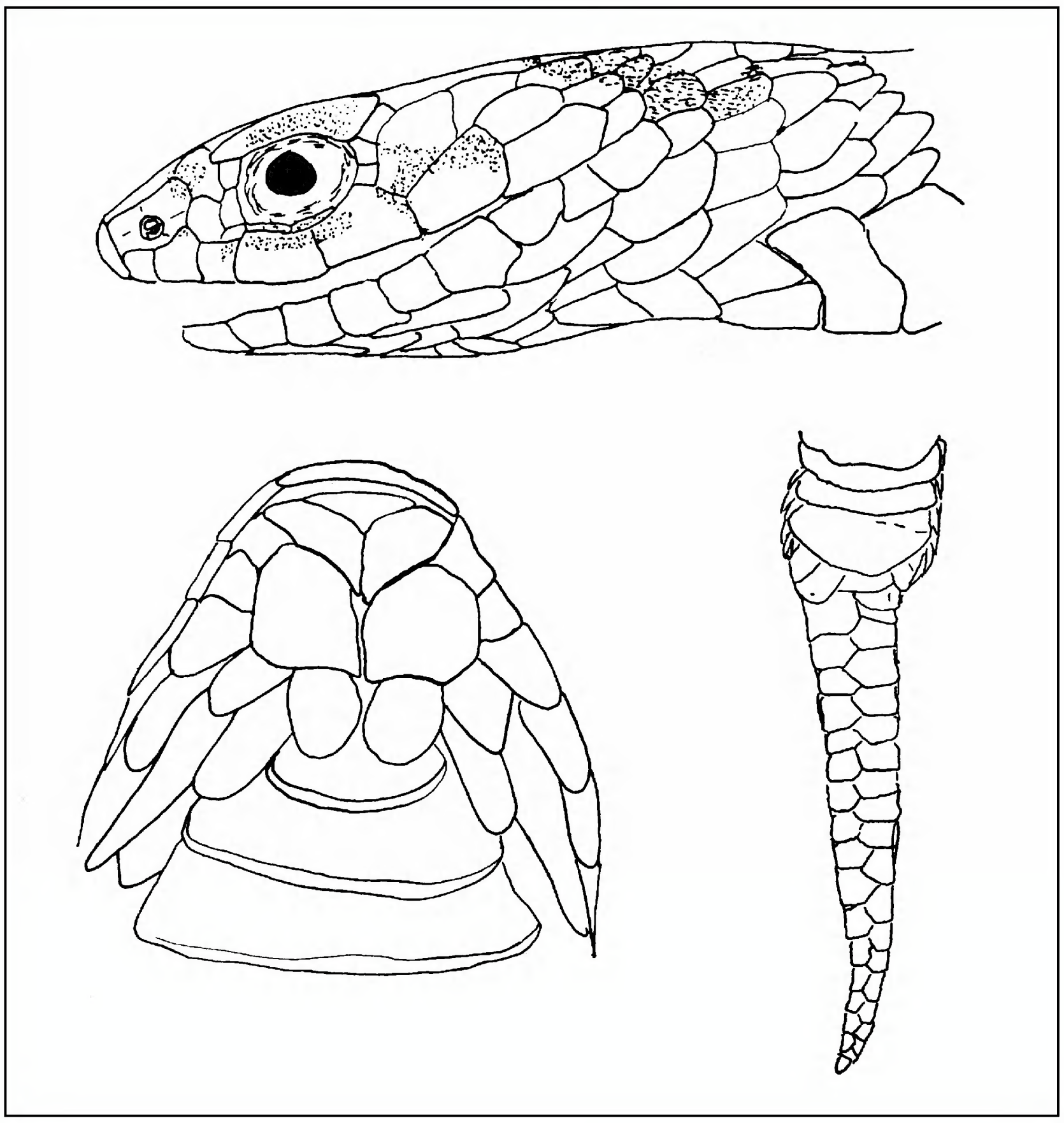
BULLETIN
of the
Chicago Herpetological Society

Volume 36, Number 1
January 2001



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The BULLETIN of the Chicago Herpetological Society (ISSN 0009-3564) is published monthly by the Chicago Herpetological Society.

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Bull. Chicago Herp. Soc. 36(1):1-17, 2001

Searching for Herps in Mexico in the 1930s — I

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Acknowledgments

The collecting trips in Mexico here narrated would not have been possible without the vital input of numerous friends, to whom I am greatly indebted. Among the most important were our hosts in the field, the most long-suffering being Dyfrig and Leora Forbes of Potrero Viejo, Veracruz. But little less so were John T. Martin of Balchacaj, Campeche; Eizi Matuda of La Esperanza, Chiapas; Mr. and Mrs. Robert Miller of Hda. La Clementina, Tamaulipas; Ernest Rateike of San Juanito, Chiapas; and Linton P. Satterthwaite in Piedras Negras, Guatemala. Edward H. Taylor's influence with Alexander Wetmore was responsible for our award of the Bacon Scholarship, and he, David Dunkle, Henry Thomas and my wife were vital field companions. Preparation of this account has been possible only through the aid of many colleagues, especially Carl and Jane Bock, Michael Breed, David Chiszar, Robert Eaton, Ned Friedman, Todd Gleeson, Michael Grant, Ruth Heisler, Richard Jones, Harvey Nichols, Mark Osadjan, my son Bruce, and Frank van Breukelen. To all I am very grateful.

Part One — Background

For most of the decade of the 1930s, it was my good fortune to spend a total of perhaps three years, scattered over several more years, collecting reptiles and amphibians in Mexico. The timing was lucky indeed, for travel there by car was by that time readily feasible, over much of the country (although not nearly as much as is possible now), but it was far more adventurous than it quickly became later. The paved roads were limited to the vicinity of large cities, and in between them travel was a challenge especially in rainy weather, and even at best a test of resourcefulness in resolving the unexpected difficulties that could be encountered at any time. In addition, the vehicles we used were already usually battered relics, hence liabilities in the first place.

The first trip was taken in the summer of 1932, with Dr. Edward H. Taylor, a famed herpetologist at the University of Kansas who was, I think, perhaps the greatest collector who ever lived, at least of herps (i.e., reptiles and amphibians). He had spent several decades collecting in the tropics of the Philippine Islands, and in central and western United States, but had not been in Mexico.

The second trip was taken in the summer of 1934, with Dr. David H. Dunkle, then a fellow graduate student at the University of Kansas where I enrolled in 1932 after returning from Mexico with Taylor.

The preceding trips were taken exclusively by car, but in the summer of 1935 I traveled alone by train down the west coast of Mexico, stopping mostly at arbitrarily selected small towns from which I would walk out to collect in surrounding areas. I met Taylor in Mexico City and we continued by train to Chiapas. He had to leave for the United States from Tehuantepec, while I continued collecting there and at other stops on the way back to Mexico City, whence I too returned home.

In the summer of 1936 I accompanied Dr. H. Devlin Thomas, also then a graduate student at the University of Kansas, in his car to Mexico City, thence to Veracruz to catch a boat to Mérida, Yucatán. He flew back to the mainland from there, while I continued collecting at various sites on the peninsula. I flew back to Mexico City to meet Thomas, and after a bit more collecting on the road to Acapulco we returned home.

On the final and longest trip, 1938–1940, for a total of about two years, I traveled by car with my newly wedded wife, Rozella Blood, whom I had dated for several years at the University of Kansas, where she was a medical student. We collected in 16 states and Distrito Federal, secured some 22,000 specimens, and traveled to some extent also by train and boat.

After that I did not return to Mexico, although the herpetology of that country remained the chief focus of my interest, until the summer of 1993, when, in company with Dr. David Chiszar of the Psychology Department of the University of Colorado, and Dr. Julio A. Lemos-Espinal of the Escuela Nacional de Estudios Profesionales Iztacala of the Universidad Autónoma de México, we collected by car for a week in late September and early October in the great sand dune area of northern Chihuahua. Another one-week trip followed in June of 1997, with the same personnel plus Adam, the 12-year-old son of Dr. Chiszar, and Clint Henke, just graduated from Ft. Lewis College in Durango, Colorado.

The 53-year gap between 1940 and 1993 in collecting in Mexico was not of course a lack of interest, but a reflection of the typical impecunious state of ordinary university instructors, and family responsibilities and commitments that were regarded as incompatible with the risks of field work and summer-long absences.

Unfortunately I never developed a habit of taking regular field notes, so my memories of these and other field trips (in the United States) are nebulous and spotty. On the other hand, I did venture to write down my recollections a few months after the first trip was taken, when memories were still fairly fresh. Similarly, I wrote an account also of the second trip not long after our return. A start was made on an account of the third trip by train, but bogged down after covering the first few weeks. The only record of the fourth trip was written briefly as a letter to a friend, but did not cover the entire trip. The final trip I summarized during the year after our return, Rozella kept a journal for a time, but it is incomplete. No record was written for the brief 1993 or 1997 trips.

Even though these several accounts are incomplete, they reflect some of the attributes of field work at a time when few herpetologists were active in Mexico, under conditions not readily conceived if not experienced. Hence the present re-

counting of the records that now exist may serve a useful purpose as a reminder of how collecting was at that time. When some of these accounts were written I did not know the names of the herps we were collecting, but even when they were known the pattern of anonymity prevailed—a pattern that was a product of tutelage under E. H. Taylor, a fiend in the field. Collecting trips were, to him, a rare privilege of intense application to the single-minded objective of collecting as many specimens as possible in whatever time was available. Very little indeed—not even rain—was allowed to interfere with that intensity, to savor our discoveries however epochal, or to reflect upon significance of observations. Our attention focussed on the collecting itself, and all of the factors involved in it, and little upon the animals themselves. Attention to them could come later, in the laboratory. The focus of most accounts was therefore upon the trials and tribulations we encountered, and it has been necessary to be content here with the same. So indoctrinated, Taylor's attitude became more or less mine, ameliorated at times by circumstances less conducive to single-minded intensity. For example, more names have been entered, and more diversions have been described, in Rozella's account of our long stay in Mexico than in any other, as a reflection of her much greater scope of interest. The difference from the other accounts is considerable.

Although the present purpose is simply to place on record these incomplete narratives, the path that led to the doorstep of Edward H. Taylor, where the basic trajectory of my future was more or less predictably established, is perhaps of background interest, for its course until that time was as highly unpredictable and illogically contingent as a career can be. How deeply the uncertainties of those times affected subsequent events remain conjectural, but they undoubtedly had an inevitable influence, large or small.

Launched, Adrift

Frederick William Stouffer came into the world in Stanwood, Iowa, September 26, 1912, as the fifth of six children born to Harry M. Stouffer and Blanche M. Hawk. His parents, dyed-in-the-wool "Pennsylvania Dutch," had lived in Pennsylvania until married there in Chambersburg, February 13, 1904. Their first child was born there two years later, but the next two came onto the scene in Plymouth, Ohio, in 1907 and 1909. The family was still in Ohio in 1910, when the fourth child was born. They were back in Ohio for the final child, however, who was born in 1914.

At about that time the father was drafted or volunteered to join the army in World War I. He was killed in Europe, at some unknown time, probably quite early, for in 1914 at least Frederick was placed in an orphan's home in Norwalk, Ohio. Very likely some of the other children were placed there, but Frederick was too young to be aware of such matters. One way or another, the children were scattered to the four winds, with little or no contact with each other after the family broke up. Their mother married later, however, becoming Blanche Hawk Stouffer Burr, but she maintained no contact with her children born before 1915, at least so far as Frederick was ever aware. Some of the children lived for a time on a farm in Ohio near where the family had passed several years earlier, and one remained there the rest of his life. One was adopted by a Florida family, and one wound up in Seattle, Washington. Two died while young, one at the age of eight years in a farm accident (fell off a wagon, breaking his neck), the other when 35 years old (unknown cause).

At any rate, Frederick's first memories were of the orphanage, which was simply taken as a matter of course without concern for alternatives. Numerous other children were there, but no sibling ties were registered in his mind. It was a simple life that lives on in his mind in only three mental pictures. One was riding in a baby carriage, with some embarrassment inasmuch as he was perfectly capable then of walking, and did indeed escape after a brief ride, as another took his place. A second memory is of sitting naked on the floor, comparing genitals quite innocently with another boy of the same age sitting opposite him.

Presumably Frederick was naughty one way or another, and the staff had a lamentable way of disciplining their children by scaring them. The basement of the building was a dark dungeon, and the children were made aware that terrible monsters lived down there, and that if they did not behave themselves they would be taken down there and left to the mercy of those monsters. Frederick was frequently given such warnings, and presumably in punishment for some major infraction he was taken down there one evening, much to his horror, while the staff member vividly described the horrible creatures penned there in total darkness, eliciting visions of burning eyes, dripping tongues and gnashing teeth. Frederick was virtually out of his mind, screaming with fear, tugging with all his might to escape from the hands that held him so tightly.

He did not again visit the dungeon, perhaps thereafter cleaning up his act so as to avoid repetition of such punishment. There is no doubt, however, that for a good many years thereafter he was inordinately afraid of darkness, although that has now largely been left behind.

Otherwise the year or so at the orphanage was tranquil and essentially unmemorable.

A major turning point, of which he was unaware at the time, came when a couple returning from a vacation in Michigan visited the orphanage with adoption in mind. They settled on Frederick, for better or for worse, and hied off with him to their home in Shawnee, Oklahoma.

Stabilization

All of this scarcely registered on Frederick, whose memories of Shawnee are few indeed. Nevertheless, official adoption papers were filed by Charles Henry Smith and Frances Muir Smith, who became the parents of a child to help fill the void that they could not otherwise alter. Naturally the new member of the family needed a name change, becoming Hobart Muir Smith. Memories of preceding years rapidly faded without regret, for a completely new world emerged to absorb all thought.

My stepfather I accepted as my father at once, and my

stepmother as my mother, even though I was always conscious of the fact that I was an adopted orphan. My father was a postal clerk then, and remained so until he died. My mother had apparently been a school teacher, but she was quite frail, even then suffering from the tuberculosis that eventually took her life.

Although I owe a great deal to these good people, the sort of intimacy that one expects in a family never existed. I know almost nothing of their antecedents, except that the Muir family from which Frances arose had its roots in Michigan, and apparently was of some stature there. We once visited the family at a cabin near one of the many lakes of the state, and I recall how much pleasure it was to roam the fields and shores there, exploring with bare feet the deep, warm dust of local roads. I was, indeed, named for Frances' brother Hobart whom I presume I met on that visit to his summer cottage.

Of my father's family I knew, and still know, absolutely nothing. At this point it seems that I existed in an emotionless void. Actually we did not live in Shawnee very long, moving to nearby Okmulgee, where we remained until I was ready for high school. The only real memory I have of Shawnee is of a pet hen that followed me everywhere, and which I took for rides in a small wagon. That memory exists primarily because of a picture I once had showing the hen, the wagon and me in the yard beside our home. All other memories are inaccessible by ordinary means.

The move to Okmulgee, somewhat larger than Shawnee, was probably arranged through an official transfer in the postal service. It may have been to improve my mother's health, or the income may have been bettered, or the home perhaps was larger, or expenses more tolerable. I knew nothing of these matters. Indeed, our stay in Okmulgee constitutes a singular void in my memory, at a time when there should have been a legion of recollections. Perhaps we remember unusually pleasant or unpleasant events or times, forgetting much or all of the normal routine of uneventful periods. If so, my life until college must have been remarkably tranquil and routine.

In Okmulgee we lived in a house with gas lights—a rather major advancement over previous dependence on lanterns and lamps, carried hither and yon as needed. However, we scrimped on gas, not lighting the fixed bulbs until well after dark—indeed pretty much as we prepared for bed. And those were terrifying occasions for me, as I had still not recovered from the fear of darkness learned in the orphanage dungeon. There was no electricity in the house, as it had not yet become a common luxury.

The war was still going on in Europe, and I remember praying every night at my mother's knee, before going to bed, for the safe return of the soldiers. My mother, being a former school teacher, undertook to educate me before I started grade school, and as a result I skipped the first grade, much to my father's delight, as he gave me a ride home on his shoulders when he knew. She apparently continued her influence in that direction, so that I also skipped the first year in high school. Thus I entered college at a quite immature 15. My school classmates were always older than I, so that I was regularly bullied by and fearful of them. In addition, I was small anyhow for my age, and slight of build even though well muscled. Running was my chief defense, and I thereby became rather fleet of foot and quick to take off, always alert to potential ambush. It was a wearing experience, however, and it was a tremendous relief upon going to college to discover that I no longer had to worry about persecution. On the other hand, the perennial alienation from other children resulted in a long-standing social immaturity.

My parents, however much they lavished attention on me, were not particularly knowledgeable about growing children. I was long afflicted with dietary rickets, with the usual, markedly concave chest, more on the left than the right, so that I was ashamed for anyone to see my bare torso. It was not until college that the condition began to improve, and no vestige of it now persists.

Another example occurred as I reached early teens, and began to experience nocturnal erections. Completely innocent at the time of the significance of this distraction, it meant nothing to me. However, my father somehow became aware of these nocturnal events, which he assumed were a result of prurient thoughts. He was definitely of the opinion that sexual acts were sinful, and he was determined that his son learned the same. He would come to my bed in the middle of the night, when I was sound asleep, and feel under the covers to find whether I had an erection or not. Often I did, and at such times I would get a sound spanking. It was all very unintelligible to me, but I could do nothing about it. After a time my father suddenly stopped his nocturnal visits, possibly because he learned that nocturnal erections are completely normal and totally unconscious in young boys. I've often wondered whether he was an exception to the norm in that context.

Not too long after adoption, a problem arose due to the fact that I had never been circumcised. Although it was pretty late to rectify the matter (I think while in Shawnee), the Smiths thought it was important to have it done anyhow. I remember nothing about it except for the fact that the bandages had to be changed occasionally. The memory is still with me as my mother came to my bed one night with the usual kerosene lamp, and in its flickering light removed the bandage. Much to my discomfiture, an erection followed, which my mother seemed to observe with much interest. Eventually normalcy returned, whereupon she finished the bandaging and I returned to sleep. I remember no comments whatever during the episode.

Charles' aversion to anything sexual was also exemplified when he visited me my first year in college. He suffered a fatal attack of angina while there, and when in the hospital the pain he felt was quite severe. He asked me to massage his chest over his heart, which I gladly did, but shortly received a hearty box on the ears because I had rubbed his left nipple in the process of massaging him.

Frances died a couple of years or so before I went to college, of tuberculosis, and was buried in Norwalk, Ohio, although why there I never learned. Charles died during my freshman college year, and was buried beside his wife. At neither funeral did I feel any emotion—no tears, no sadness,

just an acceptance of the fact. This lack of feeling preyed upon my mind, for I should have been grieving intensively. For many years I had to think that I must be some sort of monster, completely without capability of love.

Certainly there had to be considerable affection on the part of my parents, but I never reciprocated in kind, for reasons never understood. I have long lamented my failure to let them know how much their ministrations were ultimately appreciated—too little, too late.

Nevertheless I undoubtedly was a trial for them, for spankings were fairly frequent, and I must have been more stubborn than now seems possible. I recall one occasion when a rare treat of hot chocolate was prepared, but I wasn't having any. Finally they tilted my head back, forced my lips apart and poured some between clenched teeth as I continued to resist. As they stood back to observe consequences, to their surprise I expostulated, "S'good!" No more difficulties with hot chocolate.

Obviously my parents were good disciplinarians, but they did not really understand me, any more than I understood them. Like most people, I had trouble on occasion remembering names, and never became skillfully articulate. On one occasion I was asked to recall the name of my uncle, perhaps in preparation for writing him a letter. All connections had slipped my mind, and try as I might I could not think of his name. My mother apparently thought this was just another example of my stubbornness, and for punishment I was stuck in a dark closet until I was willing to pronounce his name. I was desperate, for although the closet itself gave me no trouble, I didn't want to linger there indefinitely. I prayed for help, thought and thought, all to no avail. As a wild, senseless recourse I started running through the alphabet in my mind, depending on God to stop me at the proper letter. The first run stopped on the letter H, the second on O, the third on B, and suddenly the miraculous revelation came that my uncle's name was Hobart. When I came out of the closet to sheepishly confess that his name was Hobart, of course my mother took that as confirmation that I had just been stubbornly resisting a statement of what I knew perfectly well. She never knew the anguish, and what seemed a miracle to me, that was endured. My mother's tutoring undoubtedly was a great help in scholastic advancement, although ample evidence accumulating through the years has made me quite aware that my talents are modest. She simply made the best of them at the time—something that I had to learn to do on my own some years after she died. But when she was at her prime in nurturing my potential, I placed at the top in an IQ (intelligence) test administered to all Okmulgee school children, at a score of 132. A retest was given, upon which I dropped to 128, but I was still among the top very few in the city.

Mother's tuberculosis continued to worsen, much to my father's distress. He wanted to move to a higher altitude, and ultimately managed to arrange for a transfer to the Ozark Mountains in Bentonville, Arkansas. I was then ready for high school, having just finished grade school, and it was there that I skipped the freshman year, entering actually as a sophomore.

Because of mother's bedridden life, as Dad's work continued to keep him away from home most of the day, I enjoyed considerably more freedom in Bentonville than experienced before. Lacking the discipline of former times, I was no longer an exemplary scholar, graduating with no more than a passable record. Study became rather superficial; I was bright enough to handle subjects that were easy to learn, but those that required a large dose of application suffered. Latin I barely managed to squeak through, although algebra was a lark in which I excelled without much effort although with considerable pride.

My first summer there was spent on a farm near Boonville, Missouri, with a couple whose relation to our family is now forgotten. I loved the work, living without electricity, and reading at night by kerosene lamp to the owners, who could not read. They loved the stories that appeared in serial form in their weekly paper, and I was happy to serve as best I could in the role of reader and general helper around the farm. One of my narrowest known escapes from serious injury or death occurred there, however. I had mounted to the tin roof of one of the large sheds to lay out fruit to dry, and noticed smoke arising from buildings on another farm half a mile away. Interested in trying to discern the extent of the blaze, I slowly backed up the sloping roof to get a better view, totally focussed on the fire and not upon the roof. Just as I reached back with one foot to take another step backward, I happened to notice that I was already at the very edge of the roof, the foot reaching back into thin air. Fortunately I kept my balance and managed to return to a safe purchase, but I was much chastened by the experience. Any farther and I would have fallen some 15 feet to the ground.

The following year my mother died, and my freedom increased even more. I loved to explore the streams, woods and valleys of the area, frequently walking some five miles north to a budding resort, Bella Vista. I found insects fascinating, although I had no reference works to aid in understanding their diversity. On one occasion I decided that I would like to live again with the Boonville family, and set off with a few clothes to walk there. I was soon apprehended by the local sheriff, returned to home, and this time found what a severe spanking could be. I never tried to run away again.

At some time in my youth, perhaps in the Bentonville era, I was cursed with repeated dreams of falling through wooden bridges, awakening in fright. I came to dread going to sleep, because that dream was sure to recur. The situation led to what probably was my first exercise of self-discipline, as I told myself repeatedly that I should know that when such dreams occurred, they were only dreams, not reality. I harped on that concept repeatedly, and was greatly relieved when in the usual dream I told myself (in the dream) that this was just a dream. So assured, in the dream I came back up to the bridge, after having started to fall. The same relief showed up a few more times, and then I quit entirely dreaming of the bridge and of falling. It is as though my subconscious delighted in terrifying the conscious, until it was overcome.

It was in this era that I found that for me dishonesty is counterproductive. I cannot recall the circumstances, but we were living for a time as guests in the home of an elderly

widow who casually left small change on a bureau in the living room. I began pocketing a few pieces, but of course they were missed and the widow soon thereafter remarked within my hearing that strangely some of the change was disappearing. I slipped back what I had taken with great embarrassment—great enough that I have never since wanted to put myself again in that position.

Bentonville was also the site of perhaps the closest call I've ever had. The old four-story school building had been condemned and was to be torn down. I wandered up there one day to see how the work was going, and all was silent. I entered the building, looked around a bit, saw that the roof was gone and the stairs led nowhere, and sauntered back out. Just as I cleared the building, workmen above, who I had not known were present, started throwing bricks down from the outer wall at the top of the building. The first I knew of it was when one fell on my shoulder, barely missing my head, another immediately in front of me, another to the side. I sprinted out of range, and sat down on a tree stump to recover from the excruciating pain in my shoulder. It gradually abated somewhat, enough to continue back home, and no permanent injury resulted. I never confessed what had happened to anyone, and the workmen never knew.

With little parental communication and intimacy, and no friends, high school PE (physical education) was quite a revelation. It was the first time I had encountered anything of the sort, inasmuch as PE was not offered in grade school. One embarrassing incident occurred as in one of the first meetings a race was staged among my boy classmates in the gym. We all wore gym clothes as required, but I had never heard of a jockstrap and naturally wore none. As I raced down the gym floor, well ahead of the pack inasmuch as I had practiced running all the time for self-survival, my genitals crept out from under my shorts and kept banging back and forth in plain view as I ran. I naturally slowed considerably to attempt to hide my private parts again, and finished the race well behind the leaders. I thus learned about jockstraps and was thereafter protected.

The farm work, survival activity and local explorations had resulted in considerable development of musculature, of which I first became aware in PE when the instructor asked us to jump up, grab a couple of rings suspended by ropes well above our heads, chin ourselves and then extend first one arm and then the other straight to the side. It was easy for me, but the rest of the group could not handle it, and complained that they were not as well endowed as I.

The physical fitness that I so enjoyed was short-lived, however, and the change altered my entire subsequent life. Like most males, I loved physical activity, sports of various sorts, and would have liked to participate in organized games had it been possible. However, during my senior year I contracted some sort of cardiac infection (presumably not rheumatic fever, so I have been assured) that left me with an extremely rapid heart rate susceptible to any exertion or excitement whatever. Running was completely out of the question, and I had to walk very slowly. Fortunately the bullying that had been my lot to suffer ceased, presumably because I must have appeared quite ill. I received no medical attention, I think because my father did not know the extent of my difficulties, or he thought it was something I'd outgrow. The condition persisted for weeks, however, and only very gradually improved. It was still a severe handicap in my first college years, and has remained throughout my life as a handicap to contend with. Ultimately it became simply a matter of pacing myself, and that necessity remains to the present time.

Nevertheless, even at best that occurrence has greatly limited my activities, in very diverse ways. Obviously I concluded that my life was destined to be short, and that if I intended to make a mark in this world I would have to bear down on my responsibilities to do as much as possible while there was time. I could not imagine possibly living so long as say 35 years. That realization was an important factor, no doubt, in development of persistent industry and application—attributes that have become an established part of my makeup.

The tachycardia that was my nemesis was exacerbated from the outset by sensitivity to caffeine, but I was unaware of its hypertensive effects until after Rozella and I returned from Mexico and we moved to Washington to spend the last year of our fellowship working on the collections we had accumulated. Medical attention was never readily sought, but Rozella insisted, and coffee became taboo. I had never realized what a captivating drug caffeine is until withdrawal symptoms (headaches) emerged as decaffeinated coffee was gradually substituted for untreated brews. Other sources of caffeine (soft drinks, tea) gradually became apparent and were eliminated one by one, and foods such as ice cream, chocolate and others were added from time to time to the list of substances having similar allergic effects. Thus some of the tastiest foods known to man have long been off limits. It is no great sacrifice—one just doesn't think about it.

Undergraduate College Years

Since I seemed to be interested in insects, a federal agricultural adviser in Bentonville suggested that the best nearby university in that field was Kansas State University in Manhattan, Kansas, then a land-grant agricultural institution ("the Kansas State Aggies"). I enrolled there as a freshman in the fall of 1928, and spent much of my first year exploring the nearby Wildcat Creek and canyon, which I got to know like the back of my hand. The dedication to making something of my life had not yet settled in, and as a result I flunked a couple of courses and was on the verge of being kicked out. The trouble was not only that I still had no vision of what I wanted to do, but also I had not learned to study. There were also some surprises in store relative to ability and talent. Algebra had been such a pushover in high school, with geometry not far behind, that I expected no trouble with trigonometry. It was not to be; seemingly talent did not extend to visualization in three dimensions. Although I managed to pass, the course was a disaster and I never progressed further in mathematics. That put me in a very tenuous position relative to physics, which I also passed, but by the skin of my teeth and with no understanding. It was Current Events and Botany, however, where I really fell flat. I managed to pass them later with

acceptable grades, but it was still not until my junior year that I realized that I could not get by like many of my classmates, for whom reading the assignments a couple or three times was adequate preparation.

For me, repeated reading prepared me only for tests of recognition knowledge, and no such tests were given. Test success required recall knowledge, and I found that the only way I could acquire that knowledge was to practice recall. So I resorted to the very time-consuming policy of making up every conceivable question the instructor might ask, and practicing recalling the answer. That policy produced phenomenal results; I could anticipate virtually all questions that would be asked, and was primed with the answers to any of them. From that point on my grade record was of straight A's, quite in contrast with my previous C average.

Obviously this is not the record of a brilliant mind. It is, however, a record of a mind that can nevertheless, by diligent effort, achieve worthy ends. In my subsequent, eventual pedagogical career, I have tried to encourage students not to be discouraged with an average mind, when surrounded by others who are far more brilliant. Achievement is just as accessible for the average as for the brilliant, given the effort. Many brilliant people fail to utilize their capacities, and many potentially capable people fail to do their best because they do not feel worthy. An average intellect is nothing to be ashamed of; not making full use of what talent one has, is. Motivation is a far more critical factor than intelligence.

It is not always easy to maintain motivation, however. As Taylor, an admittedly brilliant, multitalented person, occasionally remarked to me, "There are some strange gaps in your education." And, at a time when I was attempting to get my career going well, I was strongly advised by a brilliant geneticist to leave academia and make way for better incumbents. It takes a strong constitution, sometimes, to deflect such comments and to continue to do the best one can with whatever one has.

In like fashion, the concept of excellence almost invariably is interpreted extrinsically, in comparison with existent records. That concept can be very stultifying, discriminating and exclusive, suppressing motivation and endeavor when such excellence appears to be beyond personal reach. It promotes highly undesirable and debilitating (to others) arrogance, snobbishness, and intolerance. The most meaningful interpretation of excellence, on the contrary, is intrinsic—a goal accessible to everyone, however handicapped or blessed. Doing the best possible with one's potential, under the circumstances, is to me the real meaning of excellence.

A fundamental consideration in the motivation to such excellence can be the concept of accountability. There is every reason to have great reverence for the unknown and the unknowable, as well as appreciation of the known. The impressive extent of knowledge pales before the enormity of our ignorance; it is but a drop in the oceans of knowing all things. It behooves us to consider ourselves accountable to that unknown. And since that unknown is unknowable, tolerance is essential to the varied concepts of the unknown. The concept of accountability leads one to make the best one can with the potential available under the circumstances encountered. What one believes, thinks or contemplates otherwise about the unknown is interesting, often helpful, but major truths remain unknown and our concepts of them are ultimately inconsequential, hence unworthy of conflict.

As each person has an individual level of physical fitness and weight, so each member of academia has an individual level of productivity, not particularly closely correlated with amenities and facilities that may or may not be available. While I was at the University of Illinois, a much respected, senior member of the department's faculty, Harley J. Van Cleave, soundly rebuffed the complaint of his fellow faculty members that they didn't have time to do much research, by observing that their productivity would change not a whit if more time were provided. For the most part that was probably true.

Charles Darwin is an example worth noting—a man lucky enough to be of independent wealth. Unlike most men in such a position, he did not live a sybaritic life, or seek to amass more wealth, but pursued one of the most productive scientific careers ever recorded in the annals of mankind. His motivation was the difference. Certainly few can ever attain his stature, but with motivation every person of average intelligence can leave a much better than average mark with his/her passing, and should not be discouraged by the knowledge that others are brighter or more advantaged.

After my father died during my freshman year in Manhattan, while visiting me there, I was still underage and was required legally to have another guardian. A brilliant insect taxonomist, knowing that I was interested in his field, volunteered to take on the job. Thus Reginald H. Painter became my pro tem guardian. He was the most versatile insect taxonomist I have ever known, and through him I learned a great deal about this fascinating group. He was generous with his time, and although I never lived under his roof, I did partake of a couple of field trips with him and his wife, to Texas and to the southwest. Association with him essentially ceased after I graduated and enrolled at the University of Kansas, but he undoubtedly had a considerable influence upon my orientation toward a career in taxonomy.

The most important influence at Manhattan, however, was Howard K. Gloyd, who taught in the zoology department but was then still working on his Ph.D. dissertation under Dr. Frank N. Blanchard of the University of Michigan. I came under his influence quite early, as he kept live snakes in an exhibit on the top floor of the museum in Fairchild Hall, where he maintained an office. I spent a great deal of time there—far more than I should—taking care of the animals and just "fooling around," to the detriment of class preparation. However, Howard was patient with me and took me on three memorable field trips, all at his expense. The first was to the Marias des Cygnes river in central eastern Kansas, when it was in its spring flood stage and an incredible frog chorus greeted us every night. I was very naive herpetologically, and although I knew he wanted everything in that category, I let go a hatchling snapping turtle, being unaware that it fell under his purview. But I learned quickly and worked hard.

A second trip we took was to the Moab area of Utah, in the summer of 1929, primarily in search of rattlesnakes, inasmuch as his dissertation was a taxonomic review of that group. A third trip came in the summer of 1930, to Arizona primarily. On all these trips we were accompanied by his wife Dolly, a specialist in Odonata (dragonflies and damselflies), so I continued to get exposure to both entomology and herpetology. These trips, and the association with Gloyd, changed my career plans from entomology to herpetology. I yet marvel that he was so indulgent with such a naive and dependent, disoriented and modestly talented person, and he has my deep gratitude for his influence. He was the first to insist that I learn the scientific names of the animals we dealt with. I was hardly aware of them before; he had to start from scratch in making something of this waif. Through his influence, and that of Painter, I managed to publish three small notes before I graduated in 1932, and was inducted as a rare undergraduate into the honorary scientific society of Sigma Xi.

It was, of course, Edward H. Taylor who established the direction of my career in herpetology, and also in pedagogy. He taught Comparative Vertebrate Anatomy at the University of Kansas, as well as a variety of courses in herpetology, zoogeography, etc., and these were the courses that I prepared myself to teach.

Prior to our trip to Mexico I shared a number of short field trips with him to various parts of Kansas, while I was still an undergraduate. The most memorable of these was one to extreme southeastern Kansas, where we spent several days in exciting discovery, collecting species of herps that, due to habitat destruction and development, have never since been found there.

The long summer that I spent with him in 1932 in Mexico was an unforgettable experience, being my first exposure to a tropical herpetofauna, as well as my indoctrination into really expert collecting, with total attention to the business at hand, and camping with the minimum of equipment. It began the very day that I graduated from Kansas State University, June 4, 1932. To me it was a great adventure into the unknown, where everything was new and strange. Fortunately my mentor had traveled and collected in many parts of the world, and was experienced in handling whatever circumstances that might arise.

Part Two — 1932 with Taylor

The account of this trip was written shortly after our return, and is reproduced here with minor changes from the original. The focus then was upon travel itself; so far as the narrative itself is concerned, we might as well have been simply touring the country, hence unfortunately no insight into herpetological encounters is imparted.

It was with no definite geographic objective that we entered the country. We expected to explore as many as possible of the roads available. We had no advance information concerning them, except that a segment of the Pan-American highway was being constructed between Laredo and Mexico city. We took that road as our means of introduction to Mexico.

At the present time the Pan-American highway from Laredo to Mexico city presents few hazards, although animals on the highway and foggy or drizzly nights in the mountains can be frightening. At that time however, we found much of it under construction, and traversing those parts was often hair-raising. Other parts were a challenge quite unlike the ease of travel there today.

My own initial concern, on the section between Laredo and Monterrey, was the threat of banditry, of which we had heard much. So it was with some trepidation that at the end of our first day we pulled off the road and turned out our lights to spend our first camp night in the Mexican desert. My apprehensions were soon stilled by the strangely silent beauty of the vast desert with its jet black, star-spangled canopy. The stillness was broken only by the howl of coyotes and the zooming of nighthawks. No cars passed, no shouts broke the silence, and we seemed alone in the world.

Rattling carts drawn by oxen awakened us early the following morning. With the advent of day the desert lost much of its charm. It seemed barren and lifeless, and even so early gave warning of the heat soon to follow. Despite the fact that we were equipped to cook our own meals in camp, and almost always did, we satisfied our curiosity about Mexican meals by breakfasting in a little town a few miles down the road. Our initiation to the local diet was via eggs and beans — staples to which we became accustomed on those rare occasions when we indulged in ready-prepared meals.

My first acquaintance with beer was made later that day as we stopped in late afternoon to cool off and gas up for the night. I really was completely innocent of the effect that it might have, and was puzzled afterwards by the dimness of the sun, shaky arms and difficulty in discernment of lizards that formerly had been easy to detect. My thought was that I must be suffering from sunstroke, and I was considerably surprised to be informed that it was all the effect of a little bit of alcohol. It was not a sensation I appreciated at the time, or during the rest of the trip, although in subsequent years the aversion waned, at least for a time.

Sabinas Hidalgo at that time boasted nothing more famous than Powers' Cafe, where we obtained travel guides and learned that there is a very large, beautiful spring in the wooded low mountains nearby. That was our camping site for several days, as we collected many water snakes in the stream below the spring, and large numbers of lizards in the various canyons radiating out from the area. We collected separately at times, in different canyons, and it was surprising how different our results were. Being considerably shorter than Taylor, I tended to see and collect smaller animals than he did.

It was my responsibility to keep the catalog of preserved specimens, although I assumed an ancillary function of collecting insects, which I papered in lieu of mounting them, inasmuch as we did not have facilities for safe-keeping of mounted specimens. I had majored in entomology as an undergraduate, and my guardian for most of those years was a superb taxonomic entomologist, from whom I learned a great deal about insect classification. I also expected that I might continue to at

least minor in entomology as a graduate student (and indeed did), and thought that a collection from Mexico might be useful in that context. Actually, its greatest use, as it turned out, was sending the mounted specimens (prepared after we returned to the United States) to the Academy of Natural Sciences of Philadelphia in exchange for copies of all publications on herpetology in the Proceedings of that Academy. They were tearing up a few excess copies of the journal, and those excerpts have been of continual use and great value to me (and my colleagues for whom I xeroxed many copies) ever since.

Cooking fell to the lot of Taylor, who also assumed most of the expenses incurred on the trip. We carried pesos in a small collecting bag, which we tossed out of the car to mark the spot where specimens were observed on the road. Fortunately we never lost any money in the process, but it was not often that the technique was practiced—only on good highways where we could gain a little speed, and at that time there were few such roads. Mostly we traveled on trails so slowly that stops could be almost immediate. We used no potato hooks or other devices to facilitate turning of rocks and debris; our hands had to be sufficient. We did carry cheap single-shot rifles, which we used liberally on lizards. Over the several years of collecting in Mexico, we must have fired several thousand rounds of .22 caliber shot shells—to which I attribute my early deafness.

A short distance south of Monterrey the road degenerated from the excellent asphalt we had enjoyed all the way from Laredo, to a good gravel road which reached Ciudad Victoria. Not only was this city the gateway to the tropics, on the Pan-American highway, but it was at that time also the gateway to primeval roads.

It was dusk when we left Ciudad Victoria. We had gone only some ten miles or so when a heavy car whizzed by us at such high speed on this poor, little-traveled road that we were a bit suspicious of motives. A short distance beyond that point we passed a man lying in the road, wrapped in garments distinctly reddish in spots. We thought it unwise to stop under the circumstances, but proceeded on our way with mounting concern. The jungle closed in on either side of the progressively narrowing road, and the headlights frequently illuminated huge, vine-draped trees silhouetted against the dark sky. Sounds of unknown animals constantly broke the stillness. The country seemed to teem with life. Occasionally a frog hopped in the road, and frequently they were heard calling from a roadside pool. It was my duty to run out and capture such animals, but the novel exposure to unknown wildlife in such tropical abundance had my hair practically standing on end.

The road continued to degenerate. Bridges were numerous, and most were makeshifts and difficult to find, frequently being off to one side of the main road. Some, tested with my own weight, shook ominously, but they nevertheless held the car, however barely. Some sagged deeply in the middle, the two halves poorly united. Mudholes partially blocked the road in many places, and ruts were deep and wet in others. The road become nothing more than a trail. We did not wish to block the road in camping for the night, yet it was next to impossible to pull off of it. We continued on nearly until dawn, when we finally found a place to pull off the road without getting stuck. Swarms of mosquitoes kept us company, but we slept exhausted.

It was only an hour or so before the raucous screaming of parrots and the noisy calls of many unidentified animals so disturbed us that further sleep was impossible. Awakened, we scarcely recognized the surroundings as those where we had stopped but a short time earlier under the cover of darkness. A beautiful, dark green verdure completely covered the rolling hills about us. Vines interlaced in and between the closely placed bushes and trees, leaving scarcely a place where one might enter. Numerous parrots and other brilliantly colored birds constantly flew across the road clearing, while ornate butterflies and damselflies added their beauty and biotic richness to the scene.

A short distance south, the road improved somewhat, and passed through a tremendous forest of palm trees that extended in every direction as far as the eye could see. Although one could not easily discern the grass-covered homes of local residents, it appeared that few people inhabited the area. Occasionally we would pass a group of men working on the road, but there were no other signs of human life.

Beyond Tamazunchale our real difficulties of navigation began. The city is in the foothills of the Sierra Madre Oriental, over which one must pass to reach Mexico City, an essential stop on the Pan-American highway. Most of the road was one-way, there being only occasional places where two cars might pass. The portions of the road under construction were frequently the worst; large chunks of freshly blasted rocks were far more difficult to travel on than the relatively smooth, although sometimes slippery, dirt of the unimproved portions.

Fortunately for us, there was no fog at the time we crossed the mountains; the rainy season was unusually late in arriving. We had, however, a great sufficiency of thrills without that added torment. As the road continued upward, the valleys below became increasingly deep. Houses thousands of feet below in the bottom of the valleys appeared as specks, and in many places there would be nothing but the bottom to stop a car once started down. Many accidents had occurred on those hair-raising roads, reputedly so frequently that rescue attempts were no longer made. Particularly dreaded was an incredibly steep incline very near the pass at the very crest of the mountains, where but a short time earlier an old car stalled, unable to make it to the top. Backing down, the car failed to make a sharp curve and tumbled down the mountainside, bouncing in tremendous leaps with parts flying in all directions, so we were told, much to our discomfiture.

Our own car was middle-aged, and rather short on power, barely making numerous steep grades before we reached the crest. We were literally holding our breath as it stalled halfway up the final grade. It was only by dint of much coaxing and roaring of the motor that we finally made it to the top.

Cars that traveled that road all developed a common trait rather distinctive from vehicles traveling more navigable roads: a powerful-sounding roar due to the loss of muffler and/or tailpipe. Ours was no exception.

Perhaps as a result of eating mangos infested with the eggs of a certain fruit fly, I developed one of the most common diseases of the tropics—a debilitating dysentery. It was sufficiently disturbing that few impressions remain of the rest of the trip to Mexico City. A heavy dust storm heralded our arrival, and we spent a rare night in a hotel where an earthquake helped to keep us awake. At Cuernavaca I finally gave up efforts to collect, and spent several days in a motel under the watchful care of the manager, who was quite familiar with the treatment of dysentery. In the meantime, Ed collected between Mexico City and Cuernavaca, camping as usual.

Once recovered, I experienced no further illness the rest of the summer, and Ed was completely free of it. After he came for me at Cuernavaca, our goal became Acapulco, and we set off for it in high spirits. 'Twas just as well, for the rainy season, which had been unduly delayed, descended upon us full force. During our whole stay in Guerrero, except for a few days in the extremely arid Balsas river basin, there was a constant succession of rainstorms. We collected in wet clothes, rode in a wet car, slept under wet blankets and were convinced that never could we get ourselves and our belongings dry.

Our first night out from Cuernavaca was our introduction to the miseries that were to plague us for weeks. In the driving rain, we were unable to see in the darkness any place where our car might be pulled off the road to camp. Ultimately we were forced to pitch camp right in the road, inasmuch as there was no traffic whatever. The tarpaulin was spread out from the side of the car over our two cots, and we gratefully crawled under the warm blankets. A strong gust of wind almost immediately pulled loose one of the stakes driven into the gravel road, collapsing one side of the tarpaulin and dumping the water it had accumulated onto our beds. We dashed out in the rain in our pajamas, pegged the tarpaulin again, and crawled back in wet clothes under wet blankets. Then the tarpaulin started to leak, and there was no place the cots could be moved to avoid the drips. Little pools of water accumulated near the foot of our cots, where we stuck our toes whenever we stretched out. It was one miserable night.

Not only was our camp itself uncomfortable, but we had stopped unwittingly in a rather dangerous spot. It was on a curve, with a swollen, roaring river on one side, and a steep mountainside on the other. The rain loosened the soil above us, and repeatedly we were startled by the rumble and crash of earth and stones booming into the road and on into the river. We were in a quite precarious position, but unwilling to pull up stakes for something better. Fortunately no slides struck our camp, but in the morning, when the rain abated, we found the road on either side of us completely blocked. The problem of continuing on toward Acapulco was shortly solved by a repair crew that soon had one lane open.

Such difficulties would have stalled collecting efforts by many, but Taylor was not to be deterred by inclement weather or anything else, for that matter. We hunted in every kind of weather, rain or shine. Field time was precious, and was not to be wasted under any circumstances. So while we waited for the road to be cleared we turned stones on the adjacent mountainside.

Eventually, enduring one storm after another for several days, we arrived at the desert of the Río Balsas near Mezcala, Guerrero, where we pulled off the road and stayed a couple of days, drying out bedding, clothes and equipment. The region was quite barren, with a few low bushes on the level plains, and a few trees on the hillsides and near the river. Lizards were present in great numbers and in many varieties, from small species to large ctenosaurs.

Collecting was so successful there, and we were getting so well warmed up and dried out, that our stay would have been idyllic except for the swarms of insects. During the day, huge numbers of light-colored sandflies (*jejénes*) swarmed about us. They scraped the skin from a small, circular area, causing the blood to flow, which they would suck until satiated. Then they would fly away, leaving their very distinctive bites to bleed, scab and bear witness for weeks to our ordeal. They were so numerous that we could not escape their attacks, except by covering ourselves completely. It was much too hot for that, so we could only endure the blood-letting. At the approach of dusk the sandflies disappeared, but their place was taken by swarms of mosquitoes. We were constantly swatting and scratching, and carried for a month distinctive scars all over our arms, face and neck as evidence of our stay on the Río Balsas.

Thus we welcomed the rains of more southern parts of Guerrero after just two days by the river. As we continued toward Acapulco, we were steadily deluged. Along the primitive dirt and gravel road, little traveled, we were impressed with the apparent communication between local residents standing in their raincoats of dried, brown yucca leaves on the tops of hills overlooking the road. They would shout unintelligibly, presumably in an Indian dialect, to sentinels stationed farther away, who would relay the message in sing-song fashion to some more remote sentinel, until the melodic sounds faded far into the distant hills. Since the messages started near the road, we wondered whether our movements were being watched and reported far and wide.

As we entered Acapulco it was raining so hard that land could scarcely be distinguished from sea. Water running in the streets washed the gravel down to the sea so rapidly that we thought we could actually feel our car sink slowly down where we were parked to buy groceries. Unable to do any collecting there, we headed back toward the hills as soon as our shopping was completed. Providing food on a long camping trip when space is at a premium is always a problem. In the tropics, it is wise to avoid food that can spoil quickly, and canned food takes up too much space. Our solution was rice, sugar and canned, evaporated milk, every meal, three times a day. Occasionally we would add white and sweet bread purchased from women on their way to market, and on rare occasion we would buy a chicken. For emergencies—as when I became ravenously hungry—we had a few cans of salmon to fall back on. Taylor was a bit annoyed with my healthy appetite. It was a rare luxury to eat in a restaurant, usually in celebration of some lucky find of a rare or unusual specimen.

On our way back from Acapulco, we pitched a camp on a knoll between two small villages, Rincón and Cajones. The knoll flanked a high, pine-capped ridge beckoning across a very broad, shallow valley. In hopes of finding something distinctive there, we started for it early one morning, leaving the tarpaulin pitched from the car and covering our belongings. We walked until midafternoon, when the ridge was still in the distance. At that point I decided to return to the car, while Ed continued on toward the ridge.

Alone and hurried by the pangs of hunger, I took what I supposed would be a shortcut across the more nearly level valley, avoiding the tiring travel up and down the ridge we had followed in a circuitous route toward the mountain ridge. Before long I became confused in the tall, stout bamboo and brambles through which I was penetrating at a snail's pace. Lacking a machete, I found difficulty forcing apart or breaking the intertwining branches, scratching myself unmercifully on broken, projecting stubs. Eventually I came within sight of a lone tree, previously hidden from sight by the brambles. As I did so, something came crashing down from the lower branches of the tree, and went bounding through the brush in another direction, accompanied by an incredible rattling and thrashing as it forced its way through the thicket. Somewhat frightened by the prospect of meeting a jaguar in brush where I could hardly move, I made my way with the greatest haste to the nearest hillside, abandoning the valley route. It was dusk by the time I reached camp, which was intact. By the time I had cooked our rice meal, it was dark, and I assumed that Ed would spend the night in the wilderness, for it was pitch dark and seemingly impossible to walk. Accordingly I ate my rice and later busied myself tagging and cataloging the specimens I had brought back. I was startled around 9:30 P.M. by the sound of approaching footsteps, and a few seconds later Ed dragged in, weary but wearing the smile of success. He had reached the top of the mountain, and returned most of the way in dusk and darkness. He was guided by my fire for a long distance, but I was astonished that he could see where he was walking in almost total darkness.

Returning to Mexico City, we looked about us for other roads that we might explore. A road map we secured at a Huaxteca filling station suggested that we might be able to negotiate one of the two roads to Veracruz, and perhaps the one to Oaxaca.

We elected Veracruz as our first attempt, although the road we chose, through Jalapa, was somewhat the worse of the two, as we later learned. The first part, between Mexico City and Puebla, was well paved, and led through beautiful forests of large pine and fir trees. The temperature was very low, however. The night we spent camped near Río Frío (Cold River) was as miserable in its way as some we had spent in Guerrero. We kept ourselves from threatened hypothermia by sleeping with our cots together, throwing the tarpaulin on top of the blankets and permitting it to drag the ground. We dug two holes under the cots and placed our Coleman lanterns in them, where they burned much of the night. The heat was to a certain extent held under the tarpaulin, somewhat offsetting the cold from both above and below.

Beyond Puebla the road curved around the base of Malinche, the mountain whose name was given to Cortez and his mistress by the Aztecs and Tlaxcalans. Progressing a short distance beyond the base of the mountain, we gradually came into view of all three of the great volcanoes of Mexico: Orizaba, Popocatepetl and Ixtaccihuatl, contributing to a scene of unexcelled splendor. Orizaba, within sight of which we were to remain for a month, justly bears a reputation of great beauty, with its symmetrical, snow-capped cone projecting majestically to heights surpassed by only one other North American peak.

The most impressive view we were ever afforded of any of these volcanoes, however, was of Popocatepetl, from the road from Cuernavaca to Mexico City. On that particular occasion, as we rounded a corner headed back to Mexico City, the glistening cone of the volcano popped suddenly into view, across an immense valley hidden from sight by billowy white clouds. The sun was just setting in the west, throwing long purple and blue shadows over every contour of the clouds, and playing with all the color repertoire of the rainbow on the only object many miles away that rose above the white sea stretching between us—an unforgettable sight.

The whole trip from Puebla nearly to Jalapa (now Xalapa) was cold. The plateau, although essentially flat, attains a greater elevation toward the east, terminating in a high ridge at its eastern edge. Jalapa is situated on the slopes of the eastern exposure of these mountains.

Over most of the area we traversed, on trails that branched confusingly without signs, stretched interminable rows of agaves, cultivated for many indispensable uses. As we neared the mountains, the broad, flat plains became largely uncultivated, but with occasional islands of oak and scrubby pine. A few large haciendas were scattered at widely spaced intervals, some of them villages in themselves. They were well constructed of stone and adobe, and we passed a probable owner who appeared as though from the pages of a book, dressed in regalia we had by this time concluded was entirely of the days of yore. He was a fine-looking man of Spanish mien, mounted on a beautiful bay horse, dressed in tightly fitting trousers reaching the ankles, high-heeled shoes in silver stirrups, a leather jacket ornamented with designs of sombreros, stars and swords. To top the outfit, he was wearing a large, broad-brimmed sombrero and a brace of ivory-handled pistols prominently placed in open, intricately designed holsters. Greeting us pleasantly, he inquired into our difficulties, if any, and conversed with us briefly in a congenial manner.

Not far from there we later met a very different type of person as we were trying to collect in one of the scattered woods the road traversed. He was armed with a rifle, and was very gruff and moody, ordering us off the land and refusing to speak except for short, snarling commands to get going, even as we tried to explain our presence and what we were doing. As we walked back toward the car, he followed about 200 feet behind us, hiding behind trees and keeping himself well concealed. When he seemed to disappear, and we stopped momentarily to turn a log or rock, he would suddenly walk out toward us from behind a tree, then hide behind another. We

ultimately gave up any further exploration there.

Reaching the mountains west of Xalapa, we camped but one night, spending however a much longer time there the next day than planned. Our car was acclimated to the relatively warm weather of the Kansas plains, and became so chilled by the cool weather of the plateau that we had adopted a policy of parking it at night on an incline which would serve, in case the starter would not, to get the motor going by pushing the car down the slope. At Cruz Blanca we drove the car into a relatively open area in the pine forest, along a trail that led down a slight incline to a level area a few feet below the level of the road. We left the car about halfway down the incline, expecting the remainder to suffice for starting the car in the morning. The night was insufferably cold, however—even colder than at Río Frío. The gasoline lanterns under the cots were insufficient to keep us comfortable.

It subsequently appeared that the car needed the lanterns as much as we did, for the next morning the starter would scarcely turn the motor over. We tried helping it with the crank, but with no success. Soon the starter ceased to function completely. Our only recourse was to push the car down the remainder of the slope and pray it would start. The motor did snort and pant, but some cylinders refused absolutely to fire, and we were left stranded on the level area with the road above us and no chance of pushing the car onto it. We tried cranking until our arms were sore, but accomplished nothing except getting ourselves well warmed. We engaged the services of a man we found wandering in the woods near us to help us push the car out, but our combined efforts were to no avail.

It appeared now that our only chance was to walk to the nearest town and hire a car to pull us out. Ed went on that errand, while I amused myself turning logs and pawing about in stump holes in search of salamanders and lizards. Fortunately Ed was able to hail a passing truck not far down the road, and with its help the car was pulled out onto the road and pushed until it started.

We found the change from near-freezing temperatures to a subtropical climate to be very abrupt as we continued toward Xalapa. The warm, moisture-laden winds from the gulf ascend high on the eastern sides of the mountain range, losing their moisture and their heat. As they descend on the western side, on the plateau, they continue to decrease in temperature and hold but little moisture. Xalapa, at 4500 feet above sea level, is much warmer and the vegetation much more lush and heavy than at Chilpancingo, on the southern slopes of the western escarpment in Guerrero, at 4200 ft. We observed that the high temperatures and heavy growth of vegetation extend upward nearly a thousand feet above Xalapa.

Until we reached Xalapa, most of the road was passable, although not improved. Part was merely worn deeper and deeper into the earth as the water and travel through many years eroded a broad path. Most of the soil was sandy loam and, while eroding rapidly, maintained a fairly negotiable surface for car travel. Below Xalapa, however, the clay soil and greatly increased rainfall produced a very rough, almost impassable road which would be absolutely impossible for automobile travel during rainy periods. We were fortunate enough to strike a spell of dry weather in the middle of the rainy season, which permitted us to go much farther than would otherwise have been possible.

As we neared the coast, however, the water in the road had accumulated in such quantities from earlier rains that we frequently traversed puddles up to the running boards. We were traveling late one evening through one such puddle, when, about 20 feet in front of the car, we saw two bright, shining red orbs just above the water line. Knowing that they might be the eyes of some animal we might want, we stopped the car and I crawled out in the water as the eyes slowly disappeared under the surface. Watching the spot where they had disappeared, I slowly approached the spot. I had seen enough to be convinced that the animal was a crocodile, but the manner of capturing it was not so obvious. I hesitated a moment, not exactly certain where or how large the animal was, and remembering how irresistibly crocodilians twist their bodies and roll over and over to tear loose anything they grab. I didn't care to lose a finger or have a hand mangled, but lacking any handy alternative I lunged with both hands for the spot where the animal was last seen, as Ed shouted words of caution. By sheer luck I grabbed the crocodile about the neck, and was safe enough if I could hold on as the crocodile thrashed about violently, almost loosening my grip. I thought surely this must be a six-footer, but by the time I lifted it clear of the water it had shrunk to a mere three feet.

After we had caught a crocodile right in the middle of the road, we were prepared to find anything. Wonders seemed never to cease. The only thing we were not prepared for happened, however. A few miles farther on, in the middle of the little village of La Colorada, about 20 km from Veracruz, we came to another mudhole about 15 feet across. I got out of the car and walked though the puddle to test its depth and the bottom, finding it apparently no worse than others we had successfully negotiated, so Ed gave the car the gun, and splashed mightily into the mudhole. But the car came to a sudden stop right in the middle, surrounded on all sides by water. The more we spun the wheels to go either or forward (we were not in a position to be particular), the deeper the hind end sank into the mud, until we had to stop to keep water from entering the interior of the car. By this time the inhabitants of the village, which had been completely dark, awakened and soon numerous lights could be seen coming toward us, accompanied by shouting and much low murmuring. We explained our difficulty, although it hardly needed explanation, and asked permission to make camp on a little knoll near the puddle. The sheriff deliberated briefly, and finally condescended to give us permission, inasmuch as there were no homes or buildings in the immediate vicinity, and dense vegetation surrounded the area to a height of several meters. We put the tarpaulin up in tent form, carried our cots, bedding and other belongings out, and set about cooking our supper, while people stood around and watched. As we might be forced to remain in "town" for several days, and might need the help of the inhabitants to extricate ourselves, we suffered in silence the disturbance of our privacy. Their curiosity seemed insatiable, most of them remaining until we had crawled into our beds and

turned out the lanterns.

In the morning we were awakened by the same, curious crowd. As soon as we breakfasted we opened negotiations for oxen, horses, mules or any other kind of animals that could be found to pull us out of the mire. Although several men promised aid in the form of horses, none appeared for two days. In the meantime, we enjoyed the hospitality of the townsfolk, many of whom we engaged to hunt lizards and snakes at a price of from one to ten centavos each.

Although in our own country local residents are often suspicious of herp collectors, and seldom are really interested or helpful, we found the citizens of La Colorada quite the opposite. They exhibited an inherent interest in natural history of all sorts. They were observant, readily distinguished most species, and have their own names, usually Indian, for them. They seemed to know when and where to search for different species, and so aided importantly in our collecting. Of course, the fact that we paid them for animals that would otherwise have no pecuniary value no doubt enhanced their interest, but they clearly were interested despite that additional motivation.

On the morning of the third day a horse appeared. We were disappointed by the prospect of having but a single animal available, but the men of the village assured us that it would be sufficient. We hitched the animal to the front axle, but all the cursing and whip-cracking that could be mustered was insufficient to budge the car. Determined not to be defeated, all the men rolled up their white trousers and waded into the pool to push. By dint of much grunting and shouting, the car slowly moved forward out of the puddle, while the women of the village stood watching at a respectful distance. Turning the car around, Ed drove it back around the pool, safely avoiding the deep mud in the middle.

We had been so favorably impressed by the quality of collecting there that we remained another night, leaving our tent pitched where it was.

That night we separately ventured out to collect with our gasoline lanterns. Frogs and toads are best collected at night. The light from a lantern or flashlight so blinds them that they cannot see, permitting one to approach close enough to make a grab for them. Usually, at least when there are large choruses, they continue to sing while one wanders about with the light, tracking down all individual calls that sound distinctive. One thus becomes shortly accustomed to identifying each species' call. The pool I chose that night was a very inviting frog pond. Its banks were quite steep, the middle of the pond probably about six feet deep. At the edge, the water was about three feet deep. The whole surface of the pond was covered in a close network of duckweed of various sizes. The constant croaking of green, red-eyed frogs shut out sounds from the rest of the world as completely as though a wall separated it from me. Movements on the bottom of the pool released bubbles of gases which rose and burst so constantly that the resultant popping noises sounded like rain. Sometimes I would seen a whole series of bubbles that appeared to outline the shape of a form below. As the lantern cast eerie shadows on the dark background, and the frogs maintained their incessant croaking, I could not but reflect on the utter solitude of the place. I did not tarry long to enjoy the mystery of the pool, however, once my quota of frogs was caught, because some of the bubble groups looked suspiciously as though caused by crocodiles.

Fellow travelers persuaded us that we should give up any thought of continuing on the Veracruz. When we had been extricating our car from the mudhole, with the help of the villagers, we heard ahead of us the unmistakable roar of a car laboring through mud. Shortly the roar dissolved itself in the rattles of a model T Ford, which soon struggled into sight around the bend. In the meantime we had cleared the road of our car, permitting the other car to pass. We exchanged sympathies briefly, and learned that the entire road to Veracruz from this point was under water. The distance was only 20 km, yet the model T had taken two days to reach this far. With our heavier car, we probably would have remained en route for several weeks had we persisted. We were informed, however, that we could reach Veracruz by another route through Córdoba. The route we were on was only a dry-season route, whereas the other was open all year.

Attempting to return to Amozoc, where we were to find the road to Córdoba, we lost our way among the maze of trails leading in all directions and without signs, connecting various haciendas scattered across the broad plains. Skirting the hills though which we had passed several weeks before, we soon encountered the very road we wanted, saving ourselves some 150 km by the route intended. It was one of the very few times when getting lost turned out to be an advantage.

The ridge at the edge of the plateau was not so high there as at Perote, where we had crossed before. There was no extensive, tall forest of evergreens, but only a low ridge capped by scrubby cedars and oaks that marked the edge of the plateau. The descent, however, more than made up for the short and uninteresting ascent. The road wound back and forth down the side of the mountain thousands of feet in a zigzag pattern reminiscent of a foot-trail up the steep side of a Colorado mountain. Moist, chilly clouds settled down over the road, occasionally lifting to reveal the tremendous valley below, reaching far into the hazy distance where we imagined we could see the pounding surf. Below us in a panoramic bird's-eye view stretched the brown and green, square fields, the little, isolated toylike houses, and like crumbs on a patchwork quilt, the buildings that composed the nearest town of Acultzingo, Orizaba far in the distance, and Córdoba still farther ahead in the hazy mist.

Before we had descended far, the fog became so impenetrable to vision that we stopped the car to await another break in the clouds. But evening was upon us, and the fog had settled down to remain for the night. We ultimately decided that further travel was out of the question at that time, and pulled the car off to one side of the road on a slight rise at a curve. As we crawled shivering out of the car on its perch, the derisive, icy laughter of a rushing mountain stream greeted us. It was but a few feet away, hidden by vegetation. A nearby path led to it, and a few large stones appropriately placed furnished means of crossing. Winding its way 20 or 30 feet beyond, the path led to the base of a moderately large tree

at the bottom of a narrow, dry arroyo. There we camped, unloading the car of necessities and carrying them across the stream, stretching the tarpaulin out from the branches of the tree in an inverted v-shaped form.

Our cots were our workbenches. Maneuvering them into a position approaching the horizontal was a problem, for there was not sufficient room lengthwise of the arroyo, and crosswise they had no support in the middle. We finally supported the middle legs on stones, and set about cooking the rice.

It was no new experience for us to wait long minutes for the rice to cook. At lower altitudes, the rice would be ready in 15 minutes, but here, as elsewhere on the plateau, the water boiled at a much lower temperature and the rice remain unpalatable and hard for a seemingly interminable length of time. Implacably hungry, I started gnawing on some dry, hard bread we had bought several days before. As I was noisily chewing on it a shrill note startled us. All was quiet as we sat motionless, holding our breath. In a moment another call broke the silence, and we smiled at each other. Our stay was not to be entirely in vain. Some frog, whose call neither of us had ever heard before, was singing on the side of the hill behind us.

Lighting one of the gasoline lanterns, we immediately set out in pursuit of the frog, in the face of a drizzling rain that had started shortly after we had hung the tarpaulin. Reaching the spot where we suspected the frog was, we stood motionless and in silence as we awaited another call. Minutes passed, but the only sounds were of the dripping leaves and occasional spit from the lantern as a drop of water lit on its hot cap. The light obviously scared the frog, so I retreated some distance and hid the lantern under my coat, not only removing the disturbance to the frog but also warming myself considerably. Shortly the frog called, and I rushed up with the lantern. We determined that the frog was located above our heads in a certain small tree. Not being able to spot it, however, we again hid the light, standing closer to the frog. It refused to call again, however, and after a considerable length of time we gave up and returned to our rice, well cooked by then.

Immediately after dinner we returned to the chase, the frog having regained enough courage to beep occasionally. For two hours we exercised our best skills attempting to locate it, but eventually had to return without our quarry.

The long stand in the rain had chilled us to the bone. It was with great relief that I crawled between warm blankets and dropped off to sleep. I was rudely awakened in the middle of the night by a rocking jolt to the bed and a subsequent resounding crack as its supports split and the cot sagged alarmingly downhill. I sat up like a jackknife and was about to shout to Ed that an earthquake was bringing the mountain down when his laugh brought me to my senses. One of the stone supports had slipped and one of the longitudinal supports of the cot had broken. All that was necessary was to restore the stone and set the broken shaft, but it was not a restful night.

Although our campsite was one of the most precarious of the entire trip, we remained there several days. The solitude of the place; the constant, energetic roar of the adjacent stream; the magnificent view; the exhilaration of figuratively hanging on by our fingernails there; and, probably most importantly, the excellence of the collecting, led to our lengthy stay.

Upon our second night, the elusive frog continued its tantalizing serenade from the same tree as before, and we determined to find it come what may. We tired of waiting between calls, however, and eventually started to chop the tree down. I held the lantern as Ed chopped away. When the tree fell, a little flash of long legs sent us scrambling for them, but the lantern fell in the excitement and again the frog eluded us. We searched the ground and surrounding trees with great care, but nothing was found. Disgusted, we went on up the arroyo and soothed our injured spirits by catching frogs in the spring which fed the stream. It was not until the third night that we finally located the frog which had eluded us for so long. Its capture was a matter of celebration, which took the form of leaving for Acultzingo, where the soles of our boots were repaired.

We continued on to south of Córdoba, where, almost within sight of the city of Veracruz that we had striven to reach for almost a month, we turned around to explore different terrains. We found the collecting in the lush vegetation of that area rather unproductive, although in subsequent years we learned new techniques that were just as productive as our other techniques had been in more open country.

Crossing the sierra above Acultzingo, we turned southward toward Tehuacán. Almost immediately we entered a semiarid region unlike anything we had encountered since our days along the Balsas river in Guerrero. Here, however, it was cooler and more elevated. Yuccas and several kinds of low cactus were moderately abundant. One of the kinds of cactus forms a sort of colony, several hundred small heads about four inches in diameter composing a huge mound six or eight feet in diameter. By using a spade and hook, we tore apart the large mounds, and found in them rare snakes, slow-moving alligator lizards, and several large frogs which are supposed to have a call that sounds like the bark of a dog.

South of Tehuacán we again entered the Balsas river basin. It was more arid than the part we had seen in Guerrero, and the arid part appeared to be much more extensive. The variety of cacti was tremendous. There were large and small barrel-shaped cacti, four or five kinds of single-stalked giant cacti, several varieties of organ cactus, and many kinds we had not seen before. There was also a peculiar, branched kind of yucca which grew to a great height, and had a trunk flared near the ground. The leaves of that kind fall when they are dead, contrary to their usual persistence in other kinds, hanging down the sides and giving the plant an unkempt appearance. The giant cacti, much like the giant saguaro of Arizona, were so numerous in some places that it was difficult to penetrate between them.

Every few miles we passed curious terraced hills with square, flat areas about eight feet on a side covering the whole surface. Some held water, but others were dry and contained a white deposit. We concluded that they were evaporating beds used to secure salt. There were a few large evaporating plants with large, concrete reservoirs, flush with the ground, where water was allowed to stand and evaporate. We once

walked about the walls between a series of such tanks, and were accosted by an old man who suddenly appeared from nowhere on the other side of the tanks. He cautioned us to walk with care, as a man had fallen into one of them just the night before and drowned. Except for that one watchman, we saw no people about any of the numerous evaporating plants, all isolated and remote from human habitation. The source of water was not apparent, for we could find none for our own scanty needs except in rare, deep potholes in arroyos, which we found by dint of much legwork.

Although buses and trucks occasionally plied the road, we found it tough going at the frequent, steep arroyo and stream crossings. They were so difficult that the risk of long delays became overwhelming. Time was flying: we had already spent two months in Mexico, and our permits allowed us only one month more. Since we had planned to return by a different route than we had taken southward, we could well need all of a month to make it. A few miles beyond Huajuapan de León we reluctantly turned around, retracing our steps across ravines we had sweated to make navigable, to Tehuacán, where we took the paved highway to Mexico City.

We left Mexico City with the hope of reaching Guadalajara, but somewhere in Michoacán we began following cattle-trails and bent blades of grass that might lead somewhere, until we found ourselves in Maravatío, far off our planned route. Without retreating, our only course seemed to be to continue to Acámbaro. We were there told that if we went back to Maravatío we could find a road to Morelia and Guadalajara.

Along the winding dirt road to Maravatío were numerous small ponds where turtles were abundant. While we were wading in them searching the bottoms with out hands for turtles or frogs, Ed concluded that we might as well make the most of our opportunity and take a bath. I objected, for we were right out there in plain sight with no privacy. He insisted however that at least one bath a month is mandatory. I had failed to keep up with him when he had bathed in the icy water in the mountains we had passed through from Mexico City. Here the water was muddy but warm and wet, and we played and cavorted in it until evening approached. During the whole time we had the utmost privacy—not a single cowboy or car appeared in sight.

We found the road at Maravatío that was to take us to Morelia, and early in the morning, with refreshed body and gleeful spirits we started on the first lap to Guadalajara. At the sight of the rock heaps in the road, our spirits sank, and we hung on as best we might while the car jolted up and down, back and forth like a mad creature. Ed eased the car over the rocks at the slowest speeds possible, but it seemed that at any moment the tires must burst or the differential crack on projecting boulders. But what we feared most did not happen. True, a tire did go flat, but just because a cactus spine had been pounded through it. We were forced to stop on the side of a hill, unable to go farther without cutting the tire. It was a situation not to be recommended: the car on a slant, no level place to put a jack, no space to remove the tire once loosened. We were in a foul mood by the time we were ready to go again, only to find that our troubles had just begun. We went but another half mile when another tire went flat. The spines we had run over cutting across country in Oaxaca were coming through. All on the inner-tube side, of course. We must have repaired the tires at least six times before we reached Zinapécuaro, and we spent most of the day doing it. The road improved beyond there, however, and except for one stop to repair a pinched tube we had no further trouble.

In Zinapécuaro we were told that we could not get to Morelia because a bridge on the road had been out for a year or two. We doubted their word, but learned that they were speaking true. We were forced to give up entirely any attempt to reach Guadalajara, and again returned to Acámbaro. This time we took a much more navigable side road to avoid the rocky main road. The side road led us to Lake Cuitzeo, an internal drainage salt lake fed by a number of springs. We stopped at one place where three springs flowed into the lake. One was so hot that the hand could not comfortably be held in it; another was comfortably warm; and the third was luke-warm, and was the only one with visible aquatic life. All three filled the air with a disagreeable stench, most notable near the hottest water.

It was late afternoon when we left Acámbaro for Salvatierra, on the main highway north. The road was full of chuck-holes and ruts as we left town, but at least nearly dry. But the farther we went, the damper it became, our speed gradually slackening even though Ed pushed the accelerator to the floor. Soon we had to go into second to keep moving, then into low. With the motor roaring, we gradually slowed to a stop, and no amount of roaring or pushing would move us either forward or backward, but only made the car sink lower and lower into the mud, until the running boards were flush with the soil. It was now raining, and darkness was upon us. There was no use trying to dig out of this mess, for the mud over the whole road was at least 18 inches deep. Nor could we set up our tarpaulin and cots in the mess without getting all of our paraphernalia and the car full of mud and water. By force of circumstances we prepared to spend the night curled up in the car, Ed having the two front seats to lie upon and the steering wheel to wrap himself around, while I had the luggage in the rear seats to lie upon, where there was hardly room for me between the luggage and the ceiling. All night we dozed fitfully, tossing and turning to relieve pain in various parts of the body unaccustomed to bearing so much weight. As dawn broke through the eastern skies, we crawled out of our den with sore muscles and creaking joints, into a cold and drizzling rain that had covered the road and surrounding fields with water. As we stood there, too cold to wander far away, and too stiff and muddy to crawl back into the car, several cowboys came along driving a herd of cattle down the road. As I watched each hoof of the animals sink far into the mud, and come out with a dull plock, I thought that surely we must leave the car here and travel home by train. Several herds of cattle passed us, stirring up the mud and making any possible hope of getting out seem still more remote. As far as the eye could see in any direction, there was mud—deep mud, that doesn't dry in a few days' time.

Eventually two men with a brace of oxen came by. After some bargaining, they agreed to help us back to Acámbaro.

We hitched the *bueyes* to the rear axle, but the combined efforts of the motor and the oxen didn't budge the car. Fortunately, by this time the drizzle had ceased. We unloaded the car and piled all of our luggage on the tarpaulin at one side of the road. Even thus relieved of much weight, the car would not respond to the struggles of the oxen.

The only recourse left to us was to try to dig the car loose from its mooring. Mud blocked the axles, differential and most other under parts. After working about an hour removing mud, most lower parts were at least visibly free from mud, and we were ready for our last stand. The cowboys goaded their oxen with their long, steel-pointed sticks while Ed kicked the car into gear and trod the accelerator. Amid the roaring noise of the motor, the cursing and shrieking of the cowboys, the shouts of the men pushing and the snorting of the oxen, the car remained as stable and motionless as the Rock of Gibraltar.

With the failure of this attempt, our hopes dimmed greatly, as we sat and panted, looking at the contraption which contrived to give us so much trouble, yet at times served us so well. While we were thus involved in turning over in our minds the dismal facts of the situation, another team of oxen appeared down the road. Eager for just one more try, we engaged their services, and together the four oxen, aided by the motor and pushing men, slowly pulled the car backward from its mire. Afraid to let the car stand in one spot and again start settling, we kept it moving backward about a quarter of a mile, until we reached ground we knew the car could travel over under its own power. We carried all of our luggage back, loaded it in and continued back to Acámbaro without further mishap. Evening had again approached, but we were glad to remain in town and enjoy the comfort of a real bed, even if hard, the warmth of a hot meal and the pleasures of our first Mexican picture show.

It would have been foolhardy to attempt to travel the next day over the wet roads. The sun was shining, but we let the roads dry a day or two before we tried our luck again. In the meantime we collected near the town. The country was much like certain parts of eastern Kansas, with moderate stands of trees here and there, low rolling hills and rocky little streams of clear water. The surrounding hills must has been famous many years ago, for outcroppings of obsidian, the Indians' favorite stone for making tools and weapons, were everywhere. Frequently we found fragments of fashioned implements, mingled with broken bits of pottery, among the outcroppings of untouched stone.

The following afternoon we left Acámbaro for the last time, taking the road to Jerécuaro and Coroneo. It was marked on maps as a worse road than the one to Salvatierra, but we hoped that lesser traffic might make it better in the rainy season. Indeed it did prove to be somewhat better, but at frequent intervals we would encounter mudholes, which we had to circumvent. The other road had been just one long mudhole, so we were satisfied with our choice.

Nevertheless it soon appeared as though the gods had decreed that we take up our abode in Acámbaro, for we had gone but a few miles when we sank deep into one of those mudholes we had tried to circumvent. We were nearly as badly stuck as before, and evening had fallen. With our experience, however, we knew what we had to do, like it or not. The night we spent in the car was just as miserable as before, for experience did not soften the objects on which we had to lie. But the next day we immediately unloaded the car, dug it loose from the mud, and engaged four oxen to pull us through. This time we went forward, for we could not face retreating to Acámbaro every time we got stuck.

We were thoroughly confused as to the route we should take northward. Not having a suitable road map, we took the routes advised by various people we met. Most of them, unfortunately, had purely local knowledge and advised roads that were shortest, not necessarily most easily navigable. Following oxen or burros all their lives, they hardly conceived of what constituted a passable road for cars. Since they viewed a car as such an improvement over animals, they seemed to take it for granted that cars could go anywhere animals could, and even where they could not. So, instead of going to San Juan del Río, where we could have taken a gravel road to Querétaro, we went north from Coroneo over dirt roads. At Querétaro, instead of taking the direct route north to San Luis Potosí, we again lost our way and went through Celaya, Salamanca and Irapuato to Silao.

Since we had come so far from our direct route, we determined to see Guanajuato, a few miles off the road to the east of Silao, and to visit the state university there. One of the most famous of Mexican naturalists, Alfredo Dugès, had lived at Guanajuato and taught in the university. We hoped that we might see his collection, if it still existed, and examine certain specimens in which we would be interested.

The university was contained in a single building. We entered it one morning, and sat down in the study hall, a large room on the first floor, while we awaited the arrival of the director. There were four long study tables in the room, about which grouped 20 or 30 rather frolicsome students. We tried to make ourselves as inconspicuous as possible, but the students immediately recognized us as foreigners and soon gathered in a far corner, frequently glancing at us and laughing hilariously. One of the students soon broke away from the rest of them and approached Ed with a sheet of paper in his hand. On it was a passable caricature of Ed, emphasizing his lantern jaw and stern visage that always catch the eye of any caricaturist. Ed glared at the drawing for a moment, and as time passed the laughter ceased and was replaced by some apprehension, for an Ed Taylor glare can be most intimidating. Then Ed smiled and broke into a merry laugh. All was well then, and the students gathered around him to talk and hear him criticize the caricature.

The director's entrance broke up the party, the students returned to their work and Ed and I left for the director's office. Yes, the famous Dugès collection was still housed at the university. Might we see it? Yes, on one condition—that we take nothing from the jars. Everything must be examined through their glass containers. We argued that we would like to count scales and take measurements, which would be impossible through glass, but the director remained adamant. Fear-

ing that the director, who was rapidly warming to the argument, might change his mind and refuse to let us look at the specimens at all if we pursued the matter any further, we accepted the condition and went upstairs with the guide. The collection, although not extensive, was in good condition. Most of all, there were several invaluable types—single specimens upon which the description of a new species is based. Unable to remove the specimens from their containers, to get a closer view of their characters, we could do little more than to note their existence.

The region about Guanajuato and Silao looked like a section of feudal Europe. Hacienda buildings were like castles, with turrets and lookout towers, provided with slitlike apertures to fire through, all built of heavy stone. Many castle-like buildings were abandoned and in disrepair. The whole area seemed fortified, and the visitor is struck with an aura of hostility.

Between Silao and Guanajuato we took off on a wrong road and entered a rather large village, separated from the road only by a moat over which a bridge was placed. As we juggled down the cobblestone streets, a deathly stillness gradually became apparent. There was no noise, no people moving about. I walked up the street in search of a grocery store, but not a soul appeared; all the houses and buildings were either vacant or boarded shut. As we left the city and were again on the main road, we met a man who volunteered that the village was named Marfil, and that it was deserted except for a handful of people who had been unable to leave. We never learned its history.

From Silao, our road led through León, thence to San Luis Potosí. Here again we took the wrong road, although this time it did not take us out of our way. It led through Moctezuma and Charcas, thence across to Guadelupe, where we met the main highway northward from San Luis Potosí, passing through Cedral and Vanegas to Gómez Farías.

A few miles north of Gómez Farías we passed through the middle of an enormous prairie dog town which stretched mile after mile in all directions. Perhaps because we were gazing too much on this remarkable animal town, or perhaps because of the descending darkness, or perhaps because of the rain which obscured our vision, we drove off the road slightly and sank right down into one of the prairie dog homes. It was too late to dig out that evening, so we set up our tarpaulin, tied to fence posts we borrowed for that purpose, and prepared to sleep more comfortably than we had been able to do recently.

Previous nights we had spent in mudholes had been very unpleasant, but this one was to be different. Somewhere in the distance we could hear a big frog chorus. When frogs were calling we could not set around camp bewailing misfortune. So we lit out for the chorus, which must have been at least a mile away, for it seemed that we walked for hours before we reached it. We soon silenced the boisterous chorus by collecting most of the calling males, as well as some of the silent females, and headed back to the car. It was quite dark, as the sky was still cloudy. We had followed a zigzag row of trees toward the pond, and followed what we thought was the same row back to the road. But the car was not there, nor were there any tracks. We must have followed the wrong row of trees, somehow. For an hour or so we followed first one row, then another, always coming back to the road in the wrong place. We were by then utterly confused, and took a chance in following a road that might be the one with our car. We walked a long distance on it, then found that the tracks we had been following turned off to an hacienda. Wearily we retraced our steps, following the road far beyond the place where we had first come upon it. Not having located the car, we turned back on one of the rows of trees we had followed before. Stumbling about in a tired daze, in any direction intuition led us, a bright light ahead made us lift our heads and hold our lanterns higher the better to see what or who might be approaching. It was only our car, reflecting our lantern lights back to us.

For many weeks we had been jostling the car over the worst kinds of roads, over hidden ruts, rock piles and flying through mudholes. Inured to rough riding, we hardly noticed the roughness of a hill we climbed north of Gómez Farías. But to our car it was the last straw. When the engine sputtered and refused to go further even with much choking, we clambered out and glanced at our surroundings. To our surprise, lying in our tracks far back on the road, was our gas tank. Our walk back to pick it up turned into a sprint when we saw that the tank was upside down, its gasoline gurgling merrily into the soil. Turning it right side up, we carried it back and carefully laid it to rest on top of the luggage in the back seats.

Fortunately we had with us a carbide head lamp, equipped with a long rubber tube to carry the gas from the generator to the lamp. With the spring pulled out, the tube served effectively as a feed line from the tank directly to the gas line at the carburetor. The idea would have had no drawbacks if it were not for the fact that each time the car went over a bump, air would get into the tube and break the flow of gasoline. And the road was dry and full of ruts. Each time the gasoline would cease to flow, I had to get out and suck on the tube until the flow was renewed. Furthermore, the gasoline was not now being strained. Dirt would clog somewhere in the feed line of the car, necessitating much blowing and sucking to dislodge it. As the gasoline in the tank lowered, we were stopping so frequently to have the tube sucked on that we were making little progress. To relieve the situation, we poured the remaining gasoline into a gallon jug. It was initially nearly full, so for a short time we had no further trouble with it. Then the siphon tube sprang a leak near its middle. We could not patch the tube, so we cut it at the leak. Fortunately one of the ends was long enough to serve as a siphon, but it was not long enough to reach the front seat. At that point it became necessary for me to stand on the running board, holding onto the car with one hand and onto the jug with the other.

As the gasoline lowered and splashed about in the jug, again I had trouble restoring the flow. My lips were burning from frequent contact with the gas, and I had a very uneasy feeling in my stomach. When there was but an inch or so of gasoline left in the jug, we gave up the effort and waited. Eventually a truck appeared, and the driver was persuaded to

part with enough gasoline to get us to Saltillo, which we entered with me holding the jug from my perch on the running board. There the gas tank was repaired and replaced where it belonged.

We still had ten days to spend in Mexico if we liked. Rather than lose them, we took the only available road, other than that to the border, to Torreón and Durango. Except for 20 or 30 miles through the mountainous section north of Saltillo, the entire road as far as Torreón was in excellent condition. Providing care was used to avoid the deep chuckholes and prairie dog burrows, one could travel at considerable speeds. We were passing, in a nearly straight line, through semiarid desert, with scattered, low, barren ranges of hills to the south, and occasional ridges to the north.

Our camp that night was beside the elevated road. For the first time in weeks we could be safe from rains without our tarpaulin, and we could go to bed without shivering. And, what we appreciated more than anything else, was desert night collecting. The success is not always as great as in some other habitats, but it was a pleasure to walk ad libitum over unobstructed ground where every snake could be seen; under a starry sky unbroken by hovering clouds; with silhouettes of mysterious shapes on the horizon; and encountering creatures seldom or never seen in daylight. There is none of that oppressive feeling fostered by dense tropical vegetation, but rather a feeling of great freedom, of vast space in which to enjoy it, and of a welcome solitude.

We found Torreón to be the hottest place we had encountered in Mexico, situated as it is at the bottom of a cup-shaped valley and surrounded by hills of barren, shiny rocks. Inquiring about possible roads to Durango, we were advised on every hand not to go there, and that we would be risking our lives to do so. Definitely we should not risk camping away from towns. We could scarcely credit the warnings, and indeed encountered no difficulties as we traveled in Durango. We camped wherever we saw fit, and encountered no hostility. Our only loss was a jug of formalin stolen during the night while we slept. One can only imagine the consternation of the thief when the nature of the jug's contents became apparent. Presumably it was thought to be alcohol.

While I was wandering up one of the canyons in the mountains near Pedriceña, a buzz a few feet away warned me that a rattlesnake was near. It was slowly crawling up the sandy side of the shallow arroyo at the bottom of the canyon, but as I approached it began rapidly crawling toward a hole a few feet away. Fearing it would escape, I lunged for it, and succeeded in grabbing its tail. Spontaneously the snake spun around to strike. I was off balance and could not swing the snake backwards into the open. I had already resigned myself to a bite from the serpent when with a jerk the snake's head stopped an inch or two from my hand. The snake happened to have swung around a small bush as it struck, and was unable to reach my hand.

Returning toward camp with the rattlesnake in a bag, somewhat nervous from my narrow escape, I saw Ed in another arroyo, turning rocks. I went over to display my snake, but Ed put me to work helping him turn a big rock he had been unable to move by himself. I pushed from the upper side as he pulled from the downhill side. Grunting and panting, we slowly were turning the rock over, when suddenly Ed left the ground completely and flew backwards with tremendous force, landing on his back at the bottom of the arroyo, very narrowly missing on his downward flight a big boulder next to which his head now lay. Fortunately, the fall had merely knocked his wind out. We had each that day narrowly escaped a serious misfortune.

Our foray toward Durango had led us but about two-thirds of the way there, but time was running out and we had to start our return to the States and our responsibilities at the University of Kansas.

At our camp on the return trip just a few miles west of Saltillo, we were awakened as we slept late by a shrill cry of "*víbora, víbora.*" "A rattlesnake," Ed shouted to me as he hastily jumped into his clothes. I followed him as quickly as possible toward the ravine from which the shrieks were emanating. There stood a small girl, pointing to a rattlesnake a few feet from her. Ed ran up just as did the girl's father and mother. The father was armed with a hoe and was prepared to kill the snake, when Ed dashed in and took matters into his own hands by stepping on the snake (gently) and picking it up behind the head. The little girl promptly began to cry into her mother's dress, while both of her parents motioned excitedly and jabbered almost unintelligibly. Both thought the snake had been charming the girl, and looked rather hostile when I scoffed the idea. Ed smoothed matters over by assuring the father that such might have been the case, and by offering money for the snake. The farmer refused the offer, being only too glad to be rid of it.

We were jostling and rattling down the road to Monterrey from Saltillo. Suddenly one of the tires went flat. "That right front tire again," I remarked to Ed as we piled out to fix it. "Go ahead," said Ed, "I'll be back in a few minutes." With the picture of a flat right front tire firmly in my mind, I hurried the process as much as possible, hoping to have the spare tire mounted before Ed returned. He beat me to it, however, returning just as I was ready to pull the right front tire off the axle when his voice boomed out from behind me. "Hey, what the hell do you think you are doing?" Abashed, I realized that conditioning had gone much too far. The flat was on the left rear wheel.

It was three months, to a day, from the time we entered Mexico at Laredo to our return at the same port of entry. We had passed through 17 Mexican states during that time, and had accumulated over 5500 specimens. We relished reliving every minute of it, however difficult at the time, but we thoroughly enjoyed the renewed luxuries of home and paved highways.

To be continued

Bull. Chicago Herp. Soc. 36(1):18-19, 2001

Book Review: *Turtle Conservation* edited by Michael W. Klemens 2000. Smithsonian Institution Press, Washington, D.C., and London. xviii + 334 pp. Hardbound. ISBN 1-56098-372-8. US$ 35.00.

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In the last decade or so there has been a wave of new literature concerning the precarious state of the world's chelonians (i.e., freshwater and terrestrial turtles and terrapins, tortoises, and marine turtles), including a number of excellent compilations of limited taxonomic or geographic scope (e.g., Beaman et al., 1990; Bjorndal, 1982; Fritz et al, 1998; Swingland and Klemens, 1989; Van Abbema, 1997; and van Dijk et al., 2000). Another major reference on freshwater species is pending (Pritchard and Rhodin, in press). We have also seen the launching of a technical journal devoted to this subject (*Chelonian Conservation and Biology*). With this recent abundance of information on a wide range of turtle conservation issues, was a general review of conservation problems concerning *all* chelonian taxa (an ecologically diverse group of 260 or more species) really necessary at this time? I'd have to say yes, if for no other reason than to provide a concise, if occasionally superficial, overview of where chelonian conservation stands at the end of the twentieth century.

The book is divided into ten peer-reviewed chapters authored by 19 contributors (all American). The first three chapters consider various global threats to chelonians in general. Chapter One, "Primary and Secondary Effects of Habitat Alteration" (J. C. Mitchell and M. W. Klemens), considers the loss, degradation and fragmentation of turtle habitat, as well as the impacts of introduced (invasive) species and "subsidized predators," native predators of turtles that are boosted to unnaturally high population densities by human activities. One example is the raccoon, a predator of turtles, which is "subsidized" in some regions by unnatural food sources such as garbage dumps. Chapter Two, "Human Use of Turtles: A Worldwide Perspective" (J. Thorbjarnarson et al.), reviews historic and present exploitation of chelonians for food, oil, medicine, apparel, trinkets, and as pets. Chapter Three, "Disease and Health Considerations" (J. Flanagan), discusses the problem of infectious agents in captive-rearing programs and the ultimate effects to wild populations.

Four chapters focus on issues specific to chelonians that occupy certain general habitats. "Conservation of Marine Turtles" (A. B. Meylan and D. Ehrenfeld) discusses the relevance of migratory behavior, natal homing, human take, and captive rearing programs in the conservation of the seven species of cheloniid and dermochelyid turtles. "Conservation of River Turtles" (E. O. Moll and D. Moll) focuses on the taxonomically diverse group of freshwater and brackish-water species that are impacted by human manipulation of riverine environments as well as by direct human exploitation. Species dependent on lentic waters (e.g., lakes, ponds, and marshes) are discussed in "Conservation of Freshwater Turtles" (V. J. Burke et al.). The chapter entitled "Conservation of Tortoises and Terrestrial Turtles (J. McDougal) examines the impact of human exploitation, habitat loss, and disease on testudinids and terrestrial emydids. As might be expected, the four chapters overlap in many respects but also highlight the distinct differences in conservation needs among the groups.

The remaining three chapters consider aspects of various management strategies being applied to species and populations. In "Genetics and Demography in Turtle Conservation" (J. P. Gibbs and G. D. Amato), the importance of systematics, population structure, adult migration and survival rates are evaluated in the context of conservation. "Manipulation of Turtle Populations for Conservation: Halfway Technologies or Viable Options?" (R. A. Seigel and C. K. Dodd, Jr.) may be the most controversial of the ten chapters. Its critical review of the effectiveness of headstarting, repatriation and relocation programs will stimulate much new discussion of these methodologies and their appropriateness in current and future conservation efforts. The concluding chapter, "From Information to Action: Developing More Effective Strategies to Conserve Turtles" (M. W. Klemens) summarizes much of the information in previous chapters and points out the critical need for landscape-scale conservation programs alongside "grass-roots" efforts to protect chelonians at the local level.

The book is uniformly well-written and free of significant typographical errors. The Literature Cited section includes about 1,000 references, with only a few as recent as 1998–1999. There is an index, but no glossary. Instead, technical or special-use terms (e.g., disjunct populations, nektonic, and demographic stochasticity) appear in bold print as they are introduced in the text, followed by a brief, parenthetical definition. The intent here was presumably to make the book more "user-friendly" for readers not familiar with the jargon common to scientific journals.

Turtle Conservation is rather short on illustrations: only eight black-and-white photographs (showing bog turtle habitat and the effects of development) and seven line drawings and graphs. No turtles are illustrated, which would seem to be a deficiency if one goal was to include laypersons among the readership. The information that is conveyed to a reader by a few choice photos can be significant, as demonstrated in the recent volume by van Dijk et al. (2000).

A common message across the ten chapters is that, without habitat protection, all other conservation efforts (e.g., headstarting of hatchlings, harvest limits, improved protection against poaching and public education) are inadequate or even futile. This message is not as simplistic as it might seem at

first glance. Many conservation biologists, under pressure from politicians, industries, and the public, have gradually yielded to the idea that endangered species can be saved by moving individuals or populations out of the path of development or by constructing new habitat elsewhere in lieu of preserving the original. The long-term effectiveness of such relocation and habitat mitigation efforts is often unknown, and yet the "move it or lose it" approach is frequently presented as the best option available in conflicts involving endangered species and limited resources. (In New Mexico, this approach is exemplified by the plight of the endangered Rio Grande silvery minnow, a victim in part of local water-use battles; the idea is succinctly captured on a local bumper sticker: "Save the Valley, Move the Minnow.") If there is a single take-home message in *Turtle Conservation*, it is that habitat preservation must be a primary goal and an integral part of any turtle conservation effort.

I would recommend this book to anyone with an interest in wildlife conservation. For those involved specifically in chelonian conservation, it will be an important addition to the growing literature in this field and will provide a benchmark for directing future efforts to save the world's dwindling turtle populations. To paraphrase editor Klemens in the Introduction, it is my hope that future editions of *Turtle Conservation* will indicate that the approaches being discussed in the year 2000 were ultimately successful in deflecting the trajectory toward extinction.

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Bull. Chicago Herp. Soc. 36(1):19-22, 2001

HerPET-POURRI

by Ellin Beltz

Fifteen years and still writing

January 2001. Who would have believed it in January 1986 when the old Chicago Herpetological Society *Newsletter* converted into the *Bulletin* and there was no home for all the cute clipping copies that had formerly graced our *Newsletter*. Little did I know what I was getting myself in for those cold days in 1986 when I tried to master (1) writing English (2) writing English well enough to suit Mike Dloogatch (3) typing on an IBM-XT computer with a Hercules yellow monitor. Well my first efforts were more like a flaw in amber than high prose, a situation I hope I have not yet remedied in a decade and a half of practice although improvements in monitors now permit me to make mistakes in 256 colors. What else has changed? We still live in the same house which you may remember from old board meetings was in the middle of nowhere by Goose Island and is now surrounded by Container Store and other big-box retailers. My small child Eloise, known to many of you in pigtails and glasses hopping off into the swamp chasing frogs? She's 25, a computer techie and contemplating children of her own. How time flies! Where is *Frog City*, Ilene Sievert's wonderful series of "strange things that happened to us because we own amphibians" stories? Where is *NewtLine*, Debi Hatchett's and Rob Sliwinski's twisted columns about what we did at our last general meeting? Where are those who will write the new columns for this new century? Get digital. Start typing. Who knows what you'll start in 2001.

New discoveries

• "When the trout arrive, the amphibian exodus begins" states the *New York Times* Science Section [November 28, 2000]. A study compared 2,000 high Sierra lakes in California. Those stocked with trout were "the main cause of the frog's disappearance because the stocking of fish was the only significant difference between the two pristine preserves. . . . Trout are voracious predators of [mostly aquatic] mountain yellow-legged frogs, devouring tadpoles as well as adults." Other

studies of the long-toed salamander correlated these results. Since the frogs and salamander larvae are at the bottom of a fragile, high-alpine food chain, declines in these species have led to declines in others, including garter snakes. About 8,000 lakes have been artificially stocked; some local communities make their livelihoods on fishing and aquatic recreation. Actually, the headline is not quite correct, "Exodus" makes it sound as if the amphibians somehow survive this experience.

• An Air Force grant permits researchers to find out how snakes see infrared images. As reported in the *Orlando Sentinel*, "Blindfolding a snake is actually easier than it sounds." The researcher said "It's the pit vipers that you have to be very, very careful with." Both boids and vipers have members that can sense in the infrared portion of the spectrum of light. They can actually image objects by heat much as certain kinds of photographic film leave ghostly "auras" around warm objects. Researchers think the snakes' level of resolution is about 10 times better than anything currently available—classified or not. [July 23, 2000, from Alan Rigerman]

• Radiotrackers studying indigo snakes have found that the greatest threats to the species are people and cars; only one animal in their study was taken by a hawk. One was dead and buried in a backyard, while another was found hacked to pieces in a communal dumpster. They are also at risk from collectors and were protected in 1978. [Orlando, FL *Sentinel*, October 13, 2000, from Bill Burnett]

• "Exotic animals are becoming the new family pet. Move over cats and dogs. . . . Iguanas and pythons are the best-selling reptiles sold to families." [Houma, LA *Courier*, August 1, 2000, from Ernie Liner]

Turtle recall

• "A green sea turtle that was tagged and set free in the ocean off the Big Island [of Hawai'i] nearly 20 years ago has produced a crop of baby turtles on Maui. . . . [The female turtle] had not been seen [since its release] until it came ashore near a large hotel in July. In August, it was seen digging a nest. . . . Volunteers kept watch until the baby turtles hatched and made their way to the ocean. . . . Neighbors cooperated by turning down their lights. . . . It was the first recorded nesting on Maui by an endangered green sea turtle . . . about 60 percent hatched." [*The Honolulu Advertiser*, November 13, 2000, from Ms. G. E. Chow] Would someone check the style book and see if we are required to call a female sea turtle an "it"?

• Nesting leatherback sea turtles flocked to Trinidad beaches by the hundreds this year. A forest ranger said, "It's the most unusual even in the history of this beach. Turtles have always nested here, but never more than four or five a season. This year, we've already had anywhere from 250 to 300." The executive director of a 30-nation Wider Caribbean Sea Turtle Conservation Network pointed out that conservation means that nesting females are not slaughtered for food anymore in Trinidad and that more hatchlings survive to adulthood due to local conservation efforts. As many as 15 people per night watched as the ponderous reptiles came ashore and laid their eggs. [Houma, LA *Courier*, July 6, 2000, from Ernie Liner]

Glimpses of the past

• "John Quincy Adams kept a pet alligator in the East Room of the White House." And the article said he went skinnydipping in the Potomac, but didn't specify if "he" was the President or the Alligator! [*Daily Herald*, November 8, 2000, from Claus Sutor]

• Excavations in a German limestone dated to 290 million years ago have found what appears to be a bipedal lizard. This would make it the first known bipedal creature; it precedes the dinosaurs by 80 million years. Researchers suggest it used its posture and speed to outrun predators. [Orlando, FL *Sentinel*, November 3, 2000, from Bill Burnett]

• Dinofest at Navy Pier was a blast. Those of you who didn't attend (and were dino-nuts as kids) really, truly missed out on a fantastic event. There were animatronic dinosaurs, skeletal pieces, reproductions, casts, artistic impressions, posters, videos and just about every other kind of fossil display you could imagine. Put it on your list when it shows up again next year!

Don't tread on Me!

• Pinelands, New Jersey, created a rattlesnake refuge, paying developers up to $5 million for 1,100 acres of property. About one-half of a highly upscale residential development had been finished when the rattlesnake habitat was found. An area of the property will be fenced, snake passageways will be put under the road and a protection and management program will be established. At least one environmental group is opposed to the proposal. [Allentown, PA *Morning Call*, November 6, 2000, from Ribello M. Bertoni]

• The Michigan Department of Natural Resources is concerned that development in rapidly growing parts of their state threatens the future of the eastern massasauga rattlesnake there. While the state believes it has the largest populations of this species in the U.S., it is still concerned by the declining numbers of individuals of the species. The major decline of the species (as so many others) appears to stem from the early 20th century when habitat was ruined and swamps drained without any attempt to preserve original landscapes. [*South Bend Tribune*, August 30, 2000, from Garrett Kazmierski]

Gator Gulp

"An 8-foot alligator crawled out of a lake [near Bossier City, Louisiana] . . . and ate a 65-pound Labrador retriever. . . . [The dog's owner tried to] grab the dog but was knocked down by the alligator's tail. Such an attack is not uncommon in Louisiana, where alligators frequent every major lake, river system, bayou, creek and farm pond, said . . . a wildlife division supervisor. . . . [A] City Council member . . . said . . . ` We don't live in Kansas. Just as people in Alaska have problems with moose, we have problems with gators. It's one of those things where man butts up to a natural habitat." [Little Rock, AR *Democrat-Gazette*, October 28, 2000, from Bill Burnett] While on July 14, 2000, a "Florida teen survives bite from a 9-foot alligator" in Punta Gorda, Florida, according to the *Times-Picayune* of New Orleans, Louisiana [from Ernie Liner]. Several boys had been splashing around in their favor-

ite swimming hole, which was apparently also occupied by an alligator. The boy's father said he had told the boy not to swim in the lake, but added "short of chaining him to the fence, I can't watch him every minute of the day." The boy promised to listen to his father from now on.

Speaking of butting up to wildlife
One writer to the *Washington Post* "Dr. Gridlock" column wrote, "Unfortunately the driver of the car I was in did not have appropriate stopping distance to avoid hitting the `turtle rescuer's car.' I am appalled that anyone would decide to stop suddenly in a flow of fast-moving traffic, rather than pull off the road. I am confused as to the `turtle rescuer's' value system, since she placed the life of the turtle over that of herself and other drivers. This accident occurred in an area with no signs to encourage sudden stopping for turtles. . . ." [August 21, 2000, from Andy Via] I stared at this clipping for months trying to figure out what was pulling at the corner of my brain and suddenly realized that the passenger is blaming the other driver for her driver essentially following too close to stop. Change the word "turtle" into "small child" and see if this letter could ever have been written. Then drive more politely, leave room for turtles and other "small" things.

They'll all punch the glass and scream
Homosassa Springs State Wildlife Park in Florida is building a 1,500 square foot facility for a native herpetological display. They plan to have hatchling alligators and crocodiles, coral snakes, copperheads, pygmy rattlesnakes, diamondback rattlesnakes and canebrake rattlesnakes as well as hognose snakes, yellow rat snakes, red rat snakes and indigo snakes. On the amphibian side will be leopard and pig frogs and amphiumas (which most people never see because they live deep within the springs). The park receives about a quarter of a million visitors a year and is building new manatee facilities and improving its tram system as well. [*Citrus County Chronicle*, October 27, 2000, from Alan W. Rigerman]

The Sludge of Death
"Black goo continues to spread along Appalachian streams. . . . A mixture of coal particles and water with the consistency of wet cement has swallowed driveways and bridges and claimed the lawns of some residents [around Inez, Kentucky]. . . . Three days' effort have produced no measurable impact as the sludge oozes like black lava along two mountain streams toward the Big Sandy River which traces the state border north of Inez. . . . The state issued four citations to the coal company. . . . [The experts] don't know how long it will take or how much it will cost to remove the massive glob of coal sediment—several miles long and up to 70 yards wide that's slowly moving [down gradient]. . . . Fish and other wildlife have been killed. . . . Some towns downstream have had to shut down their water intakes until the material passes. The leak was caused by the collapse of an . . . underground coal mine [adjacent to the retaining pond where the sludge was stored. The goo] . . . gushed into the underground mine, along its shafts and into the streams. . . . The contaminated water is moving forward about 10 miles per day. [Tuscaloosa, AL *News*, October 14, 2000, from Ernie Liner]

So where is it now?
"House OKs $1.4 billion to reclaim Florida's Everglades . . . " A legislator called it "the largest, most comprehensive environmental restoration ever attempted." The project seeks to rebuild what was there before the U.S. Army Corps of Engineers ditched, drained and channelized the whole state beginning in 1949. Half of the Everglades are dried out; all this potential drinking water goes out to sea. Overdevelopment and pollution from sugar processing industries is reported to contribute to the continuing decline of wildlife in the area. Tacked onto the bill were several other water control and cleaning projects, including one in California! [Little Rock, AR *Democrat-Gazette*, October 20, 2000, from Bill Burnett]

Tight job market, but
No experience is necessary for a trainee alligator wrestler being sought by the Seminole Indian tribe of Florida. But they note that any potential wrestler "must be brave and a risk taker." The pay is $12 per hour plus medical and life insurance. So far, no women have applied for the job, but men who have are described as having watched too much of this summer's hit TV series "Survivor." [*Albuquerque Journal*—Career Marketplace, September 17, 2000, from J. N. Stuart]

Yet another loose python
"A [Silver Springs, Florida,] man who doesn't like snakes wrestled an 11-foot Burmese python along a busy state highway then carted it around in a box until he found someone to take it from him," reports the *Miami Herald*. The story began when he was flagged down by a woman on the side of the road at night. The woman said she had the biggest rattlesnake she'd ever seen pinned under her car. She moved the car, the snake slithered off, the man caught it. Animal control was closed, the sheriff's office refused to deal with it, so he took it to the firehouse. The next day it was examined by a vet and found to have an infection and possibly some broken ribs. The vet said there would be people to take the snake if its original owner did not come forth. [November 8, 2000, from Alan Rigerman]

In the Land of the Mouse
From Chicago Cows to Orlando Lizards, the rage for public fiberglass street art continues. Forty-nine strange, lizard- or gecko-like sculptures will be installed in Orlando, Florida, and will be auctioned off next October. They are cute, expect to see a lot of press and relatives' snapshots of these things! [Orlando, FL *Sentinel*, October 16, 2000, from Bill Burnett]

Keep these under lock and key, too
Three baby Komodo dragons hatched at the Honolulu Zoo. They are offspring of two 8-year-old parent Komodos on loan from the National Zoo in Washington, D.C., since 1993. [*The Honolulu Advertiser*, September 28, 2000, from Ms. G. E. Chow]

Hop into Peyton Place
The Malapai Borderlands Group of Douglas, Arizona, reports great progress with its frog monitoring project. Students at the Douglas High School, directed by the late Carol Hopkins, raised about 1,200 tadpoles of Chiricahua leopard frogs for

release. Unfortunately, vandals broke into the school during the project and killed many of the tadpoles, so only about 700 were actually released. The MBG, the high school and the U.S. Fish and Wildlife Service are working on a negotiated deal to ensure survival of the frogs and continuing ranching activities in the area. [*MBG Newsletter*, August 2000, number 7 from J. N. Stuart]

One froggie, two froggie

For years I've been writing little herp "filks," paragraphs to other people's songs. They usually air only on scraps of paper in my file cabinet, but being so involved with frog monitoring now, I tried to pull one out and polish it up. So, to the tune of "How to handle a woman" from *Camelot*:

> How to count an amphibian?
> Wait, I will tell you how.
> The way to count an amphibian
> Is to listen, merely listen.
> Then you'll know.

Then, Sean McKeown sent a page from the October 8, 2000, Luis Obispo County, California *Tribune*, which tells of a new method for counting frogs, so we'll have to add a verse

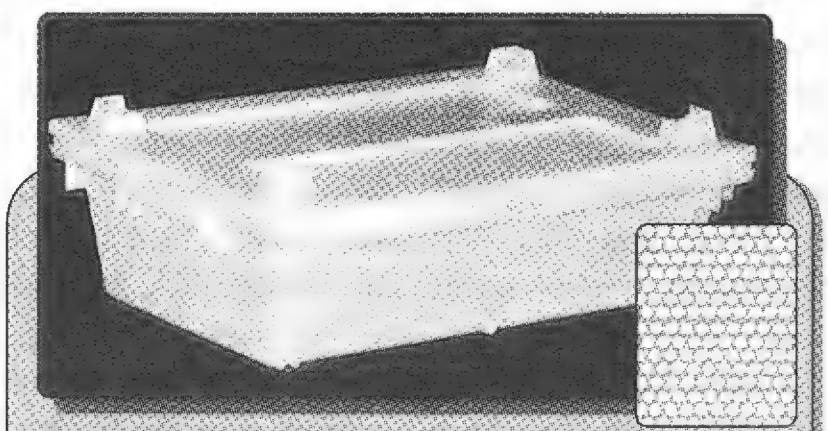
> How to count an amphibian?
> Norman Scott has a new way now.
> The way to count an amphibian
> Is the eyeshine, pinkish eyeshine.
> From your light.

Dr. Scott points out that the closer the light is to your eyes the easier it is to see frog eyeshine and says that spider eyes flash very bright bluish-green and sparkle. As this research was done in California, please adjust for your own viewing conditions. We don't want to add a verse for you that starts, "How to count up the gators? Wait, I will tell you how. . . ."

See, we returned to clippings from newspapers and magazines! Thanks to Marty Marcus, Ms. G. E. Chow, Andy Via, Claus Sutor, Steve Barten, B. R. Norman, D. L. Dodd, Bryan McCarty, James N. Stuart, Oliver J. Sieckmann and P. L. Beltz for interesting articles that I haven't used yet and other stuff. You can contribute too! Send clippings to: Ellin Beltz, 1647 N. Clybourn Avenue, Chicago, IL 60614-5507. Make sure your name is on each piece (those little xmas freebie labels are great for this task) and that the date/publication slug is attached, visible or in some way around so I can give the proper journal credit. Please fold a minimum number of times. Some of my contributors use those big 9 × 11 inch envelopes which makes it really easy to do my monthly anti-origami. E-mail letters and comments to <ebeltz@ripco.com> . And check out my translations of the reptiles and amphibians scientific names at <http://www.neiu.edu/~ebeltz/herps/etyhome.html>.

Health Food for your herps!

Highest quality rodents are available in all sizes from pink mice to jumbo rats. Fresh frozen crawler mice are only 17¢ each in lots of 2,000. All frozen animals are shipped in insulated boxes.



Nearly 9,000 holes and they still can't escape!

The new TTC is ideal for transporting, breeding and storing your mice, rats, snakes and lizards. The strong plastic TTC has over 2,200 holes on each side and over 4,500 holes on the lid to provide maximum air circulation even when stacked. Each TTC can be divided into 2, 3 or 4 compartments and its smooth plastic construction makes washing a snap.

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Herpetology 2001

In this column the editorial staff presents short abstracts of herpetological articles we have found of interest. This is not an attempt to summarize all of the research papers being published; it is an attempt to increase the reader's awareness of what herpetologists have been doing and publishing. The editor assumes full responsibility for any errors or misleading statements.

SARDINIAN HORSESHOE SNAKES

C. Corti et al. [2000, Amphibia–Reptilia 21(3):279-287] report that the horseshoe snake (*Coluber hippocrepis*) is one of the most threatened Italian snakes, especially in Sardinia where its present occurrence was unclear prior to this study. This paper reviews the current distribution of *C. hippocrepis* in Sardinia, and confirms that this species is still found in a limited number of sites of Cagliari province. Its actual presence in Oristano province, on the contrary, is still in doubt. Statistical analyses on several morphometric measurements taken from museum specimens suggest that snakes from the central Mediterranean area (Sardinia, Pantelleria, and Tunisia) are distinguished from those of the western Mediterranean area (Portugal and Morocco) by having significantly higher numbers of ventrals. A few natural history notes on Sardinian specimens are presented, and a rationale for an urgent conservation plan is given.

NEMATODE INFECTIONS IN BRAZILIAN LIZARDS

D. Vrcibradic et al. [2000, Amphibia–Reptilia 21(3):307-316] looked for nematodes in specimens of the four most abundant diurnal lizards (*Tropidurus torquatus*, *Cnemidophorus littoralis*, *Mabuya macrorhyncha* and *M. agilis*) inhabiting the restinga (coastal sand dune habitat) of Jurubatiba, Rio de Janeiro state, Brazil. Eight species of nematodes were found. *Tropiduris torquatus* had the richest and most diverse nematode fauna (8 species), whereas that of *C. littoralis* was the poorest and least diverse (2 species). *Tropidurus torquatus* also had the highest overall prevalence (92%) and mean infection intensity (37.2; standard deviation 82.0; range 2–549). Similarities in nematode faunal composition between host species was generally low, except between the two *Mabuya* species.

HISTORY OF MALFORMATIONS IN MINNESOTA LEOPARD FROGS

D. M. Hoppe [2000, J. Iowa Acad. Sci. 107(3-4):86-89] examined incidence of external abnormalities in 2,433 museum specimens of northern leopard frogs (*Rana pipiens*) collected in Minnesota between 1958 and 1963. Abnormalities were present in 0.7% of the specimens, and were classified as either predator amputations (0.5%) or malformations (0.2%). In order to compare rates of malformation with current rates, the author visited some of the collection localities of the museum specimens to capture and examine live frogs. Frogs were captured at only five of 14 of the historical sites. At these sites, 2.5% of the frogs examined were malformed, compared to 0.4% of the museum specimens from the same sites. Other field work indicated an increase in the number of malformed frogs found between 1976 and 1993 (0.2% of frogs were malformed) versus the period 1996–1997 (2.3% of frogs were malformed). The author concludes that malformities are more frequent, more varied (in type of malformation), more severe, and more widely distributed in 1996–1997 than in 1958–1993.

HABITAT USE BY THREE SNAKE SPECIES

W. L. Keller and E. J. Heske [2000, J. Herpetology 34(4): 558-564] used radiotelemetry to determine habitat use by 11 black rat snakes (*Elaphe obsoleta obsoleta*), five fox snakes (*Elaphe vulpina vulpina*) and four blue racers (*Coluber constrictor foxii*) at the Middle Fork Fish and Wildlife Area in east-central Illinois in 1997 and 1998. Black rat snakes selected forested habitats, whereas fox snakes and blue racers selected old fields and prairie restorations. No consistent association with forest-field edges was noted for any species. Fox snakes and blue racers were primarily terrestrial, whereas black rat snakes used all categories of vertical space but were primarily arboreal. Snakes were tracked to three hibernation sites, including an abandoned railroad trestle and two abandoned trash and construction-material dumps. These data provide the first comparative, quantitative descriptions of habitat use for these species in sympatry, and one of the few descriptions of hibernacula in a region dominated by row-crop agriculture.

AMPHISBAENIAN ECOLOGY

J. K. Webb et al. [2000, J. Herpetology 34(4):510-516] report that examination and dissection of 216 museum specimens of two species of amphisbaenians (the shovel-snouted *Monopeltis anchietae* and round-headed *Zygaspis quadrifrons*) from southern Africa provided data on morphology, sexual dimorphism, reproduction, and dietary habits. The two species differed considerably in absolute size, in body proportions (e.g., head width relative to snout–vent length), and in the degree of sexual dimorphism in these traits. In the relatively heavy-bodied *Monopeltis* both sexes attained similar body lengths, but females had wider heads than conspecific males. Conversely, in the thin-bodied *Zygaspis*, females attained larger body sizes than conspecific males, and there was no sexual dimorphism in head size. Clutch sizes were small in both species (means of 2.4 neonates in *Monopeltis*, 3.3 eggs in *Zygaspis*) and were not correlated with maternal body size. Termites were the most common prey for both taxa, but a wide variety of other soft-bodied invertebrates (beetle larvae, caterpillars) was also consumed. The two species differed in dietary composition, mean prey size, and in the numbers of prey items per stomach. Stomachs of *Monopeltis* contained more prey items than stomachs of *Zygaspis* (means of 72.2 versus 13.0 prey items), and prey ingested by *Monopeltis* were larger than those of *Zygaspis*. In *Monopeltis*, there was a significant positive correlation between predator size and prey number, but larger lizards continued to feed on relatively small prey. The reverse pattern was found in *Zygaspis*. The substantial differences in trophic biology between these two taxa and other sympatric fossorial reptiles, suggest that adaptations to fossoriality do not constrain ecological diversity within burrowing squamates.

Unofficial Minutes of the CHS Board Meeting, December 15, 2000

The meeting was called to order at 7:30 P.M. Board members Karen Bielski, Rich Crowley, Jon Ihrig, Linda Malawy, Marcia Rybak and Steve Spitzer were absent. A quorum was not present.

Officers' Reports

Recording Secretary: Emily Forcade read the minutes of the November meeting. Corrections were made and the minutes were accepted.

Treasurer: Gary Fogel distributed the treasurer's report. As of the end of November expenses exceed income by $8,879. He will give the final report for 2000 at the January meeting.

Membership Secretary: Mike Dloogatch distributed the membership report for December. We started the year with 859 members and ended with 808.

Vice-President: Lori King said that January's speaker would be Terry Vandeventer, who will talk about the herps of Mississippi. Gerry Salmon will be the February speaker. He will be discussing herping in South Carolina, then and now.

Publications Secretary: The website now allows people to specify animals they wish to donate or request animals for adoption online. Gary Fogel and Lori King said they will provide updated ReptileFest photos for the website.

Standing Committees

Grants: Mike said the January *Bulletin* would invite applications for the 2001 grants program.

Shows: Jenny Vollman said that there are no shows coming up until March. Mike Dloogatch found show guidelines for exhibitors and has sent them to board members. They are available for the Committee on Guidelines to discuss.

Raffles: Gary Kostka said that the raffles have earned $1,200, which is over our goal for the year. Lori mentioned that Sandy from *Reptiles* Magazine has been concerned about subscriptions donated to the raffle not being returned. Gary will discuss this with her. Jack said that the income from the raffle is related to the high quality with which Gary runs it.

ReptileFest: Mike Dloogatch said that a committee meeting was held on December 8 at the UIC 'Fest site. Besides Mike, the attendees were Darin Croft, Rich Crowley, Steve Spitzer and Lisa Yerian. It's an impressive facility and really big. It may not be possible to close off a third of it without losing needed features. The temperature control is great. There are skylights with natural light. Bill Bavirsha, the UIC representative, was organized and helpful. We may be able to adjust the amount of open space by, for example, leaving the bleachers down and creating a wide isle. We will buy skirts for the tables and UIC staff will staple them to the tables. Jack distributed an E-mail he received from Rob Carmichael. Rob would like to show venomous reptiles at the 'Fest. Jack told him that our insurance precludes it, but Rob said he was licensed and insured. Jack spoke to our insurer who said that this would be acceptable if we placed a rider that declared this. Jack invited Rob to attend the board meeting to discuss this. Mike Dloogatch said that regardless of the contractual arrangement, we could still be sued if there's an incident. Lori King and Mike raised concerns about the emergency protocols in case of an accidental envenomation. Jack said that for Rob's proposal to be taken seriously, he would need to attend a board meeting to discuss it. Jack will tell him we discussed this, and invite him to attend the next meeting.

Ad Hoc Committees

Meeting Dates: Jack said he got a letter from Erin Battison from the CAS stating that she was able to book some but not all of the dates we requested for our general meetings in the auditorium. They can offer us the room on something other than a regular day each month. So at this point we have meetings booked through March 2001 only. There was a strong feeling within the group that we have our general meeting on a predictable day each month. Until we can work out a suitable place and time, we will continue to meet at the Nature Museum. Jack will begin to look into other options.

Nominating 2001: Jack complimented the committee for a nice job producing a slate and managing the election. He said that in February the 2002 committee should be convened.

Awards: The awards have been paid for and will be picked up next week.

Trips: Char Haguewood polled members at the November general meeting about possible zoo trips in late spring.

Old Business

Frog Call Tapes: Mike Redmer said that the balance of the money for production of the tape has been raised. Lang Elliot will produce the tape by February.

New Business

Jack received an E-mail from the father of the Brazilian exchange student who was introduced at a CHS meeting. His son was appreciative. He then asked if there was a way his son could be involved further with our organization. We will try to involve him in some CHS activities.

Ideas and Suggestions

Jack said he would like to include this as a regular part of the board meeting. Nametags will be incorporated into the beginning of the general meeting.

Round Table

Mike Redmer said that his presentation for the December general meeting would run at least 1¼ hours. He asked if he could start at 8 P.M., so that he wouldn't run overtime. Jack agreed and said that he would limit the break to conserve time.

The meeting adjourned at 8:40 P.M.

Respectfully submitted by Emily Forcade for
Recording Secretary Karen Bielski

Advertisements

For sale: Frozen rodents now available at the General Meeting! Just another good reason to come to the meetings at the Chicago Academy of Sciences Patty Notebaert Nature Museum. Assorted sizes of rats and mice. Call Rich Crowley at (708) 485-5705 for details and pricing.

For sale: rats and mice—pinkies, fuzzies and adults. Quantity discounts. Please send a SASE for pricelist or call Bill Brant, *THE GOURMET RODENT*, 6115 SW 137th Avenue, Archer FL 32618, (352) 495-9024, E-mail: GrmtRodent@aol.com.

For sale: murine-pathogen-free rats and mice available in all sizes, live or frozen: pinkies, fuzzies, crawlers, small, medium and large. Frozen crawler mice in lots of 2000, $.17 each. Also available, full grown hairless mice. FOB shipping point. Master Card accepted. Call (518) 537-2000 between 8:00 A.M. and 5:00 P.M. or write SAS Corporation, 273 Hover Avenue, Germantown NY 12526 for prices and additional information.

For sale: from **The Mouse Factory**, producing superior quality, frozen feeder mice and rats. We feed our colony a nutrtionally balanced diet of rodent chow, formulated especially for us, and four types of natural whole grains and seeds. Mice starting from: pinks, $.17 each; fuzzies, $.24 each; hoppers, $.30 each; weanling, $.42; adult, $.48. Rats: starting with pinks at $.45 each, to XL at $1.80 each. Discount prices available. We accept Visa, MC, Discover or money orders. P.O. Box 85, Alpine TX 79831. Call us **toll-free** at (800) 720-0076 or visit our website: http://www.themousefactory.com.

For sale: from Bayou Rodents, excellent quality feeder mice and rats. Every size available. Pinks starting at $20/100. Orders are shipped by overnight service Monday thru Thursday. We accept Visa, MasterCard and Discover. For more info, contact Rhonda or Peggy, (800) 722-6102.

For sale: **high quality frozen feeders**. Over a decade of production and supply. Seven sizes of mice availabe: small newborn pinks up to jumbo adults. Prices start at $25 per 100. Feeders are separate in the resealable bag, not frozen together. Low shipping rates. Free price list. Kelly Haller, 4236 SE 25th Street, Topeka KS 66605, (913) 234-3358 evenings and weekends.

For sale: herp books. Bury and Germano, editors, *Biology of North American Tortoises*, 1994, 204 pp., b & w photos, collection of papers, some scattered light markings on cover and spine, otherwise exc. cond., softbound, $32; Sherman and Madge Minton, *Venomous Reptiles*, 1969, 274 pp., b & w photos, dust jacket, hardbound, $25; Philip W. Smith, *The Amphibians and Reptiles of Illinois*, 1961 (1971 reprint ed.), 298 pp., 252 figs. (range maps, b & w photos), 91 tables; softbound, $25. All books in excellent condition except as indicated. Prices postpaid. William R. Turner, 7395 S. Downing Circle W., Littleton CO 80122, (303) 795-5128, E-mail: turnerbmrk@prodigy.net

For sale: Rare Hondurans. Taking advance orders now at reduced prices for 2001 hatchling ghosts, snows, anerythristics, hypos, albinos, three kinds of double hets, etc. Also "Applegate Special" AZ Mountain Kings. I ship only feeding animals, satisfaction guaranteed for 30 days. Call Terry, Albino Tricolors, (727) 824-0705 (St. Pete, FL) **before 10 P.M. EST please**, or E-mail: rtdunham@albinotricolors.com.

For sale: Brazilian rainbow boas, c.b. 9/00, eating defrosted, beautiful colors, $100 each or quantity discount; juvenile male Malaysian blood python, mahogany coloring, $100 or best offer. Delivery possible. I will not "mail" them. Sue or Ed, (607) 264-3441, or Paradox1@capital.net. [NY]

For sale: Brazilian rainbow boas—screaming red & orange babies, only five left, $125; "starburst" woma python—pick of the litter male, outstanding animal, $1250; 3½' female Argentine boa, $150; 4' striped male African rock python, $150; Pueblan milksnakes, c.b. '00, $35. All animals are captive born and are feeding on prekilled rodents. Mark Petros, Strictly Serpents, (847) 854-3259, E-mail: turbovixens1@prodigy.net.

For sale: Send SASE to CRC, P.O. Box 0731, Las Vegas NV 89125-0731 for brochures and list of species available. Limited bookings available for guided tours of herpetological collection sites in Nevada. Call/fax (702) 450-0065.
URL http://www.herp.com/crc/ E-mail: crcsafetie@aol.com.

Tours: Adventure tours to Madagascar! Join **Bill Love** seeing and photographing fauna and flora, heavily herp-biased, across the world's least known mini-continent. Maximum fun & photo ops assured on every trip. Contact him at: BLUE CHAMELEON VENTURES, P.O. Box 643, Alva FL 33920. TEL: (941) 728-2390, FAX: (941) 728-3276, E-mail: blove@cyberstreet.com.

Tours: **Road-riding in Costa Rica!** Treat yourself to the trip of a lifetime! Learn about tropical herps, find them, photograph them, see where they live. **Greentracks, Inc.**, offers the best herpetological tours led by internationally acclaimed herpetologists and herpetoculturists. See the Amazon, visit cloud forests, experience the world's greatest rainforest, super sunsets and good company. Call (800) 9-MONKEY.

Wanted: **red** female Malaysian blood python. Adult or juvenile preferred but will consider hatchling. Willing to trade (I have Brazilian rainbow boas, c.b. 9/00, a juvenile Malaysian blood male and leopard or fat-tail geckos, coming in the spring/summer) if that works out for you. Sue or Ed, (607) 264-3441, or Paradox1@capital.net. [NY]

Wanted: big-headed turtles; mata mata turtles; Mexican giant mud turtles (*Staurotypus triporcatus*); exceptionally large common snappers (45 lbs. & up); large alligator snappers (over 90 lbs.); spectacled caiman from Trinidad, Tobago and Surinam; dwarf caiman; smooth-fronted caiman; albino turtles (except red-eared sliders). Walt Loose, (610) 926-6028, 9:00 A.M. – 1:00 P.M. or after 11:30 P.M. Eastern Time.

Line ads in this publication are run free for CHS members—$2 per line for nonmembers. Any ad may be refused at the discretion of the Editor. Submit ads to: Michael Dloogatch, 6048 N. Lawndale Avenue, Chicago IL 60659, (773) 588-0728 evening telephone, (312) 782-2868 fax, E-mail: <MADadder0@aol.com>.

Chicago Herpetological Society
Statement of Income and Expense

	2000		1999	
	INCOME	EXPENSE	INCOME	EXPENSE
Membership	20,567.27	424.34	16,189.70	650.66
Telephone		534.81		569.67
Miscellaneous Postage		59.00		65.00
Monthly Programs		2,025.18		1811.54
Supplies and Equipment		52.20		24.00
Books and Merchandise	89.18		126.42	
Bulletin:				
Printing & Postage		21,330.45		16,731.22
Back Issues	114.50		23.00	
Advertising	975.00		779.00	
Raffle	1,174.00		740.50	
General Meetings		2,050.00		1,920.00
CHS ReptileFest	10,835.00	13,022.77	11,202.00	11,061.28
Zoo Field Trips			1,488.40	1,450.00
Workshops			100.00	
Shows		1,160.37		444.25
Grants		2,150.00		2,261.75
Donations	1,346.25	1,334.00	179.00	208.00
Refreshments/Picnic	36.00	75.34		72.72
Library				30.00
Miscellaneous		1,059.49		182.53
Interest	2,684.02		2,528.21	
Insurance		979.00		979.00
Awards		325.47		126.19
Amazon.com	142.92			
2001 Midwest Symposium		521.45		
	37,964.14	47,103.87	33,356.23	38,587.81

Cash as of 31 December 1999	**$54,492.76**
2000 Income - 2000 Expense	(9,139.73)
Cash as of 31 December 2000	**$45,353.03**

News and Announcements

2001 CHS HERPETOLOGICAL GRANTS PROGRAM

The Chicago Herpetological Society announces the 2001 CHS Herpetological Grants Program to award financial support for herpetological research, education and conservation. Several awards of up to $500 each will be available. Interested parties may apply for a grant in any one of the following categories:

1. Illinois Herpetology
2. Graduate Student Research in Herpetology
3. Undergraduate Research in Herpetology
4. Field Studies in Herpetology
5. Conservation
6. Captive Management, Husbandry, and Propagation

An attempt will be made to award grants in each category, but depending on the application received, not all categories may receive awards. Some categories may receive more than one award. The Grants Committee reserves the right to reassign the category under which a given proposal is submitted.

Applicants must be members of the Chicago Herpetological Society. In accepting a grant, the recipient agrees to abide by all state and federal laws, to submit a written summary of the project for publication in the CHS *Bulletin*, and to acknowledge the Chicago Herpetological Society in any publications that result from the subsidized research. Recipients are encouraged to submit their work as an article for the CHS *Bulletin*, or to present a program at a CHS general meeting.

Applications should include the following:

1. Statement of the objectives of the proposal.
2. Description of materials and methods.
3. Complete budget, not to exceed $500.
4. Brief resumé of the applicant, if an individual. If the applicant is an organization, background information on that organization should be included.
5. A completion date for the project.

Applications must be typed, double spaced, and submitted in duplicate. Applications should be kept brief and simple, and proposals longer than three to five pages are discouraged. All applications must be received by 1 April 2001, and awards will be announced by 1 May 2001.

It is the goal of the Grants Committee to award grants to a variety of applicants; enthusiastic amateurs will receive equal consideration with professional herpetologists and graduate students. Topics which might translate into quality CHS *Bulletin* articles or monthly meeting programs are favored, though not requisite.

Submit applications to: Chicago Herpetological Society, Grants Program, 2060 N. Clark Street, Chicago IL 60614. Questions should be directed to Michael Dloogatch, (773) 588-0728, or MADadder0@aol.com.

MOVING??

Please let us know in plenty of time of any change in your mailing address. The *Bulletin of the Chicago Herpetological Society* is sent to our U.S. members by bulk-rate third class mail. This means that the U.S. Post Office will not forward your *Bulletin* with the rest of your mail. This is so even if you make a special request that your magazines be forwarded (such a request only applies to second class mail).

SPRING 2001 CHICAGO WILDERNESS CALLING FROG SURVEY

Join us this spring in the Calling Frog Survey and learn to identify the 12 species of frogs and toads found in our area. Last year's program exceeded expectations, but there are still hundreds of lakes, streams, and other wetlands not yet monitored. Monitoring will require three evenings of your time this spring. If you attend one of the workshops, you will hear the calls on tape, see slides of the different species, learn the monitoring procedure, and be offered a site to monitor if you don't already have one in mind. It's important work, easy, and according to last year's volunteers, lots of fun. For a preview of the frogs and monitoring procedures, visit the Survey's website at <www.habitatproject.org> .

Workshop dates:

DuPage County — February 8, 7 – 9 P.M. The Grounds and Resources Complex at Blackwell Forest Preserve, 29 W 220 Mack Road in West Chicago. Please pre-register with Cindy Hedges at (630) 876-5929 by January 31.

Lake County — February 17, 9 A.M. – noon. Lake County Forest Preserve District Headquarters, 2000 N. Milwaukee Avenue in Libertyville. Contact Russ Hendricks, (847) 782-5922.

Kane County — March 3, 9 A.M. – noon. Pottawatomie Community Center in St. Charles (call for directions). To register or for directions call Mary Ochsenschlager at (630) 513-3338.

McHenry County — February 3, 9 A.M. – noon. Prairie View Education Center, 2112 Behan Road in Crystal Lake. Contact Sarah Denham (815) 728-8307.

Will County — February 10, 9 A.M. – noon. Environmental Learning Center, 20851 S. Briarwood Lane in Mokena. Contact Renee Gauchat (708) 479-2255.

REPTILEFEST REMINDER

Hi everyone . . .

In case you weren't moved to immediate action after last month's note regarding ReptileFest 2001, here's another reminder for you:

ReptileFest will be held March 24–25 at the University of Illinois at Chicago,
and we need YOU to participate. Please submit your exhibitor form TODAY.

We really do have a lot more space to fill than in previous years so we are especially encouraging people to display who have never done so before or have not done so in the past few years (you know who you are). Here are some things to keep in mind:

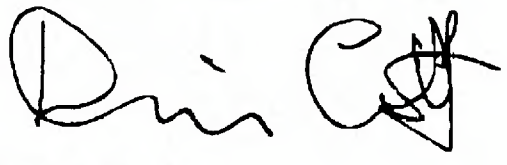
* Any herp that's not a "hot" herp is a good one to display! Don't think that your "common" reptile or amphibian is too common to be appreciated. All herps are "exotics" to most people and if we have lots of leopard geckos, corn snakes, and fire-bellied toads, maybe that will help people realize that there are plenty of herps out there that are easier to take of than a Burmese python or a green iguana!

* One of the mains goals of our society is education. The more people we have exhibiting, the more one-on-one educating we can do. Primarily, this comes from exhibitors chatting with the public about their herps. If you feel ambitious, however, put together a display on some herp-related theme like "Amphibian Reproduction" or "Making a Desert Terrarium" or "Herps Without Legs." Be creative!

* If you don't want to bring your own herps or set up your own display, sign up to work the tables of other members! Seven hours is too long to be at a table without a break, so we really need some people who could fill in for members who are taking a lunch break. No experience necessary! Contact me, (773) 288-8851, or Nick D'Andrea, (773) 927-7828, to sign up as a relief worker.

For all the details and forms, check out the CHS website at <www.chicagoherp.org>.

Thanks for your help!



Darin Croft

UPCOMING MEETINGS

The next meeting of the Chicago Herpetological Society will be held at 7:30 P.M., Wednesday, January 31, at the Peggy Notebaert Nature Museum, Cannon Drive and Fullerton Parkway, in Chicago. The featured speaker will be **Terry L. Vandeventer**, a field associate with the Mississippi Museum of Natural Science, Jackson, Mississippi, and a frequent leader of herpetological tours to the tropics for Greentracks, Inc. Terry's topic will be "A Review of the Herpetofauna of Mississippi and the Biogeographic Regions Influencing Its Distribution in the Magnolia State, or . . . Mos'ly We Jus' Shoot 'em!"

At the February 28 meeting **Gerry Salmon**, of Rhinebeck, New York, will speak on "Herping in South Carolina — Then and Now."

The regular monthly meetings of the Chicago Herpetological Society now take place at Chicago's newest museum — the **Peggy Notebaert Nature Museum**. This beautiful new building is at Fullerton Parkway and Cannon Drive, directly across Fullerton from the Lincoln Park Zoo. Meetings are held the last Wednesday of each month, from 7:30 P.M. through 9:30 P.M. Parking is free on Cannon Drive. A plethora of CTA buses stop nearby.

The Chicago Turtle Club

The next meeting of the Chicago Turtle Club will be Sunday, January 28, 1:00 – 3:30 P.M., at the North Park Village Nature Center, 5801 N. Pulaski, in Chicago. The care and keeping of aquatic turtles will be the topic of the day. Meetings are informal; questions, children and animals are welcome. Parking is free. For more info call Lisa Koester, (773) 508-0034, or visit the CTC website: http://www.geocities.com/~chicagoturtle.

CHS MERIT AWARDS PRESENTED

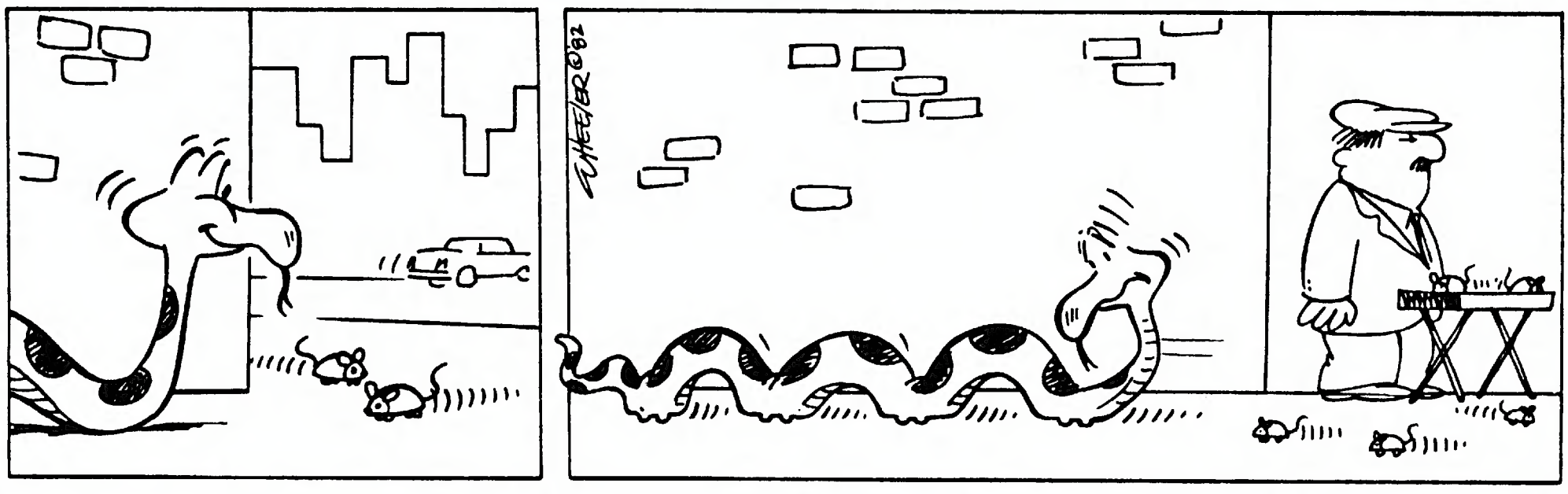
Each year the Chicago Herpetological Society bestows awards upon a few select members in recognition of their service to the organization. At the December 27 meeting three awards were presented. **Robert Bavirsha** and **Daniel Bavirsha** each received the CHS Merit Award. This honor is given each year to one or more individuals selected by the Awards Committee for outstanding service. **John Kostka** became the very first recipient of the Youth Merit Award, presented in recognition of outstanding service by a member under 18 years of age.

DONATIONS TO THE NOVEMBER 29 RAFFLE

The following is a listing of those businesses and individuals who generously donated items for our monthly raffle at the November 29 meeting. The donated items are shown in parentheses.

Absorption Corp. (Carefresh pet bedding); **ZooMed** (iguana food); **Tetra Terrafauna** (Hot Block under-tank heater); **Sunshine Mealworms** (cricket gift certificate); **Timberline** (Easy Water cricket hydration gel); **Super Pet** (Rock Pool Cover / Island Sanctuary / ceramic dish); **Hagen** (Prime supplement); **Ilene Sievert** (cage & plastic plants); **Sally Hajek** (herp posters); **Lori King** (herp salt & pepper shakers / herp refrigerator magnets); **Marcia Rybak** (snake pen & notebook / ceramic turtle); **Charlotte Henkle** (aquarium & stand / light & fixture / book: *The Care of Reptiles and Amphibians in Captivity*); **Ron & Dotty Humbert** (aquariums / snake sculpture / aquarium filter / driftwood cage decor); **Jack Schoenfelder–Reptiques** (mini aquarium); **Dr. Cheryl Roge–Best Friends Animal Hospital** (herp night light / book: *A Color Guide to the Tarantulas of the World*); **CHS** (T-shirt).

THE ADVENTURES OF SPOT



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